

ROLAND PARK OVERPASS REPAIRS
BASE BID
DEPARTMENT OF PUBLIC WORKS
NORFOLK, VIRGINIA

CN NO: 4182
 DATE: 01/03/12
 DESIGN: EAJ
 DRAWN: WBB
 REVIEW: CAR
 REVISIONS

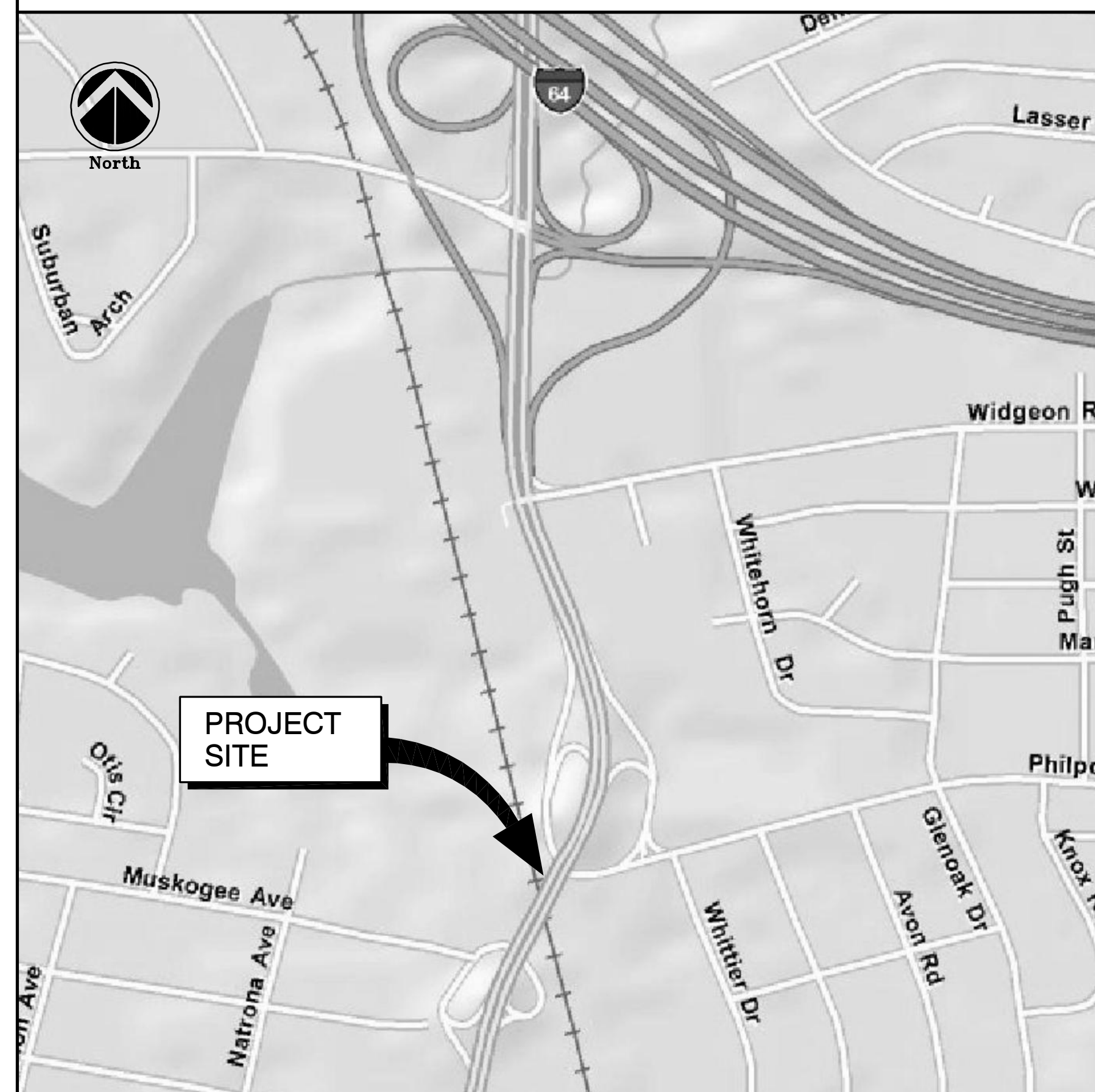
No.	Date	Description	By
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G1

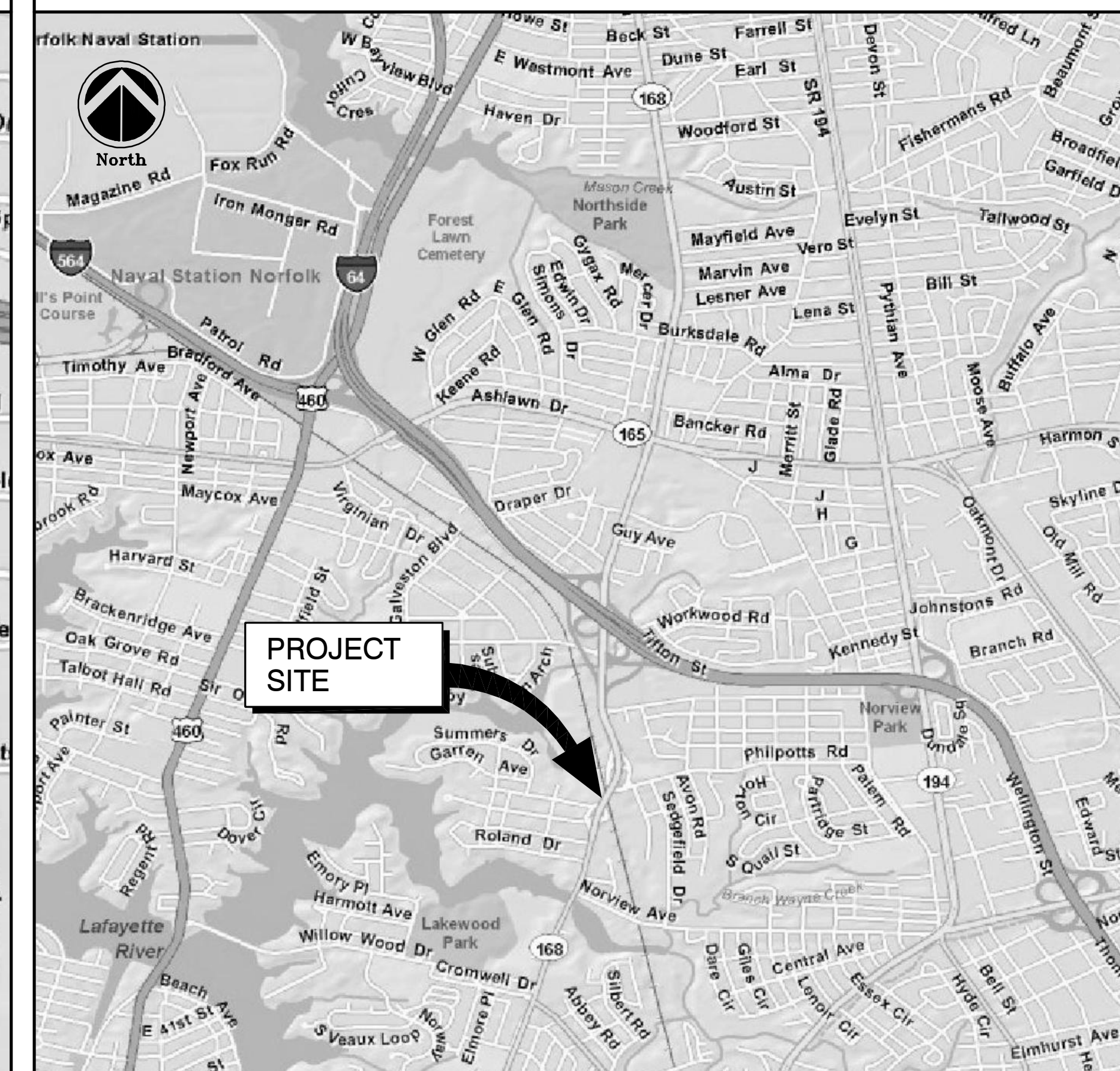
SHEET 1 OF 15

SHEET NUMBER	SHEET INDEX	SHEET TITLE
GENERAL		
G1	1	TITLE SHEET
STRUCTURAL		
S1	2	PLAN, ELEVATION AND GENERAL NOTES
S2	3	PIER 1 DETAILS & CONCRETE REPAIR NOTES
S3	4	PIER 2 DETAILS
S4	5	PIER 3 DETAILS
S5	6	PIER 4 DETAILS
S6	7	PIER 5 DETAILS
S7	8	PIER 6 DETAILS
S8	9	PIER 7 DETAILS
S9	10	REFLECTED DECK PLAN SPANS A-D
S10	11	REFLECTED DECK PLAN SPANS E-H
S11	12	TRANSVERSE SECTION, RECOATING NOTES
S12	13	BEARING REPLACEMENT DETAILS AND NOTES
S13	14	BEARING STIFFENER REPAIR DETAILS AND NOTES
S14	15	MAINTENANCE OF TRAFFIC PLANS

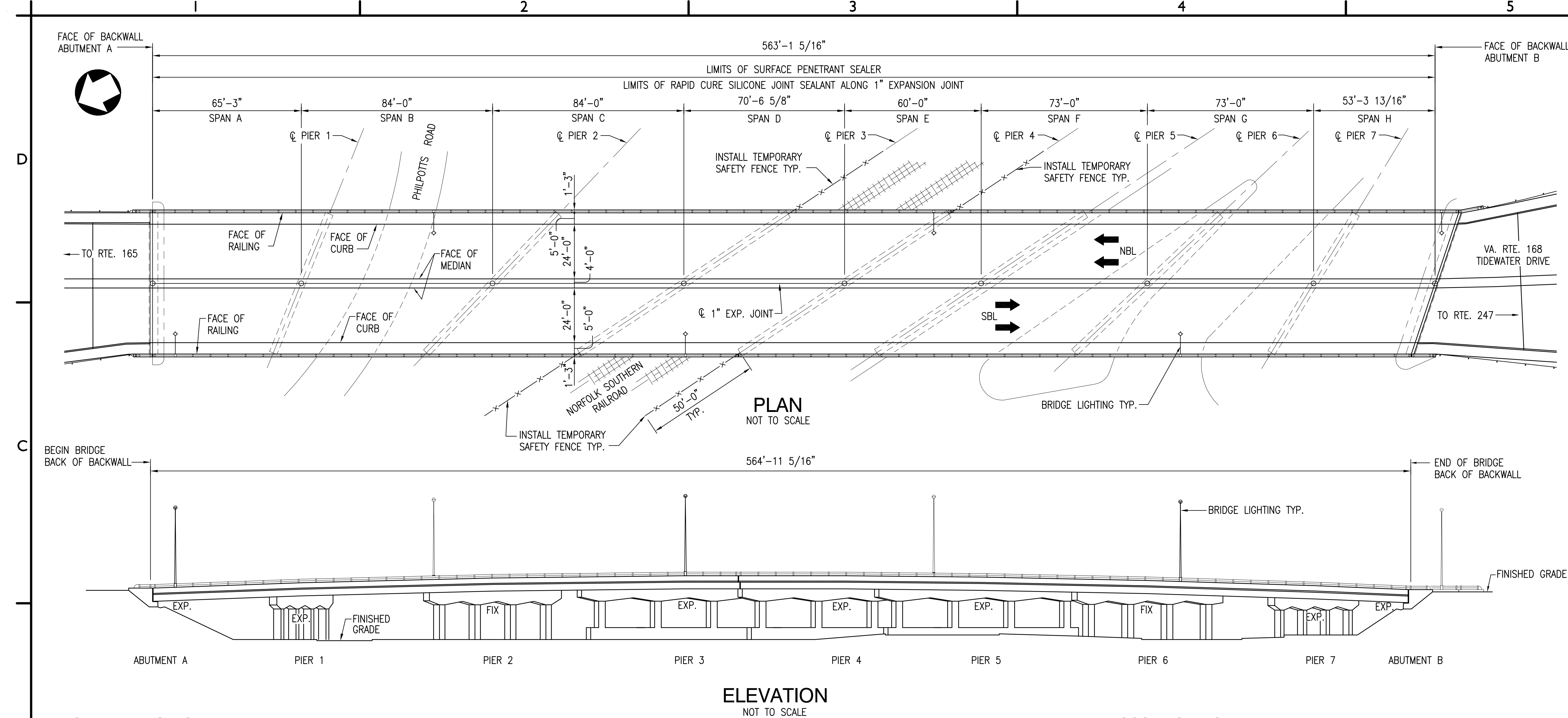
SCALE: 1" = 500'



SCALE: 1" = 2000'



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GENERAL NOTES:

SPECIFICATIONS:

- CONSTRUCTION – VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE SPECIFICATIONS, 2007.
- DESIGN – AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 4th EDITION 2007; 2008 AND 2009 INTERIM SPECIFICATIONS; AND DOT MODIFICATIONS.
- STANDARDS – VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE STANDARDS, 2008
- THESE PLANS ARE INCOMPLETE UNLESS ACCOMPANIED BY THE TECHNICAL SPECIFICATIONS AND SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.
- STATE BRIDGE NUMBER OF EXISTING STRUCTURE IS 122-1815.
- THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE VIRGINIA DEPARTMENT OF TRANSPORTATION WORK AREA PROTECTION MANUAL, JUNE 2011 AND LATEST REVISIONS.
- ALL STRUCTURAL STEEL INCLUDING BEARINGS AND SOLE PLATES, SHALL BE ASTM A709 GRADE 36.
- THE EXISTING STRUCTURE IS DESIGNATED A TYPE B STRUCTURE IN ACCORDANCE WITH SECTION 411.
- DETAILS OF THE ORIGINAL STRUCTURE ARE SHOWN ON PLANS CXXXIII-7 AND DETAILS OF REPAIRED PORTIONS OF THE STRUCTURE ARE SHOWN ON REPAIR PLANS DATED JAN. 25 1999. BOTH PLANS ARE AVAILABLE AT THE CITY OF NORFOLK DEPARTMENT OF PUBLIC WORKS, DIVISION OF STREETS AND BRIDGES.
- ALL ITEMS SHOWN ON THESE DRAWINGS ARE EXISTING UNLESS OTHERWISE NOTED.
- THE DIMENSIONS GIVEN FOR THE EXISTING BRIDGE STRUCTURE AND ASSOCIATED COMPONENTS INDICATED ARE APPROXIMATE AND ARE GIVEN FOR ESTIMATING PURPOSES ONLY. DETAIL WORK SHALL BE BASED ON CONTRACTOR'S FIELD MEASUREMENTS.

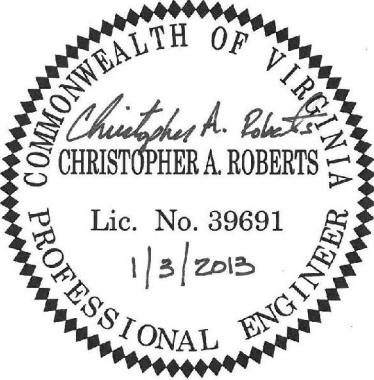
THE CONTRACTOR SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH THE PLANS AND EXISTING STRUCTURE, INCLUDING THE VERIFICATION OF ALL PERTINENT DIMENSIONS BEFORE PROCEEDING WITH THE WORK. DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER.

- THE CONTRACTOR SHALL COORDINATE THE LOCATION AND LIMITS OF THE CONTRACTOR'S LAY DOWN AREA WITH THE CITY OF NORFOLK DEPARTMENT OF PUBLIC WORKS.
- REPAIR AREAS SHOWN ON PLAN ARE APPROXIMATE. ACTUAL REPAIR AREAS FOR PAYMENT WILL BE FIELD VERIFIED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER PRIOR TO THE APPLICATION OF REPAIR MATERIAL.
- THE CONTRACTOR SHALL PROTECT FROM DAMAGE ALL UTILITIES LOCATED WITHIN THE CONSTRUCTION AREA FOR THE DURATION OF THE PROJECT.
- ALL EXPANSION JOINTS, BEARING REPLACEMENT AND BEARING STIFFENER REPAIR WORK SHALL BE PERFORMED DURING WEEKEND BRIDGE CLOSURES ONLY. CONCRETE REPAIR AND PAINTING WORK MAY BE PERFORMED AT ANY TIME.
- THE CONTRACTOR SHALL SUBMIT A BLOCKING AND JACKING PLAN PREPARED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF VIRGINIA FOR APPROVAL BY THE ENGINEER AS PER VDOT ROAD AND BRIDGE SPECIFICATION SECTION 412.03(e).
- EXISTING CONSTRUCTION THAT IS TO REMAIN IN PLACE, BE REUSED, OR REMAIN THE PROPERTY OF THE OWNER AND IS DAMAGED AS A RESULT OF THE CONTRACTOR'S OPERATION SHALL BE REPLACED WITH NEW OR BE REPAIRED TO IT'S ORIGINAL CONDITION IN ACCORDANCE WITH THE SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER.

ALL REPAIRS WITHIN NORFOLK AND SOUTHERN RAILROAD RIGHT OF WAY SHALL BE PERFORMED IN ACCORDANCE WITH SPECIAL PROVISIONS FOR PROTECTION OF RAILWAY INTERESTS AND SECTION 107.19 OF VDOT ROAD AND BRIDGE SPECIFICATIONS. NO WORK SHALL OCCUR IN AND NO PERSONNEL SHALL OCCUPY THE AREA BETWEEN THE CENTERLINE OF PIER 3 AND THE CENTERLINE OF PIER 4 WITHOUT THE PRESENTS AND APPROVAL OF THE RAILROAD FLAGMAN. THESE TRACKS SHALL REMAIN IN SERVICE AT ALL TIMES DURING CONSTRUCTION.

SCOPE OF WORK:

- INSTALL TEMPORARY SAFETY FENCE, SEE SHEET S1.
- REPAIR SPALLED/DELAMINATED CONCRETE ON UNDERSIDE OF DECK (SOFFIT) AND PIERS, SEE SHEETS S2-S10.
- INSTALL RAPID CURE SILICONE JOINT SEALANT ALONG 1" EXPANSION JOINT IN MEDIAN, SEE SHEETS S1 AND S11.
- CLEAN AND RECOAT EXISTING STEEL SUPERSTRUCTURE MEMBERS, SEE SHEET S11.
- APPLY CONCRETE SURFACE PENETRANT SEALER TO TOP OF DECK, SEE SHEET S11.
- REPLACE EXISTING EXPANSION BEARINGS AT ABUTMENT A, PIER 4 AND ABUTMENT B SEE SHEETS S9, S10 AND S12.
- CLEAN AND REPLACE EXPANSION JOINT SEALS AT ABUTMENT A, PIER 4 AND ABUTMENT B, SEE SHEET S13.
- REPAIR/REPLACE EXISTING BEARING STIFFENERS AT SELECT LOCATIONS, SEE SHEETS S9, S10 AND S13.
- PROVIDE MAINTENANCE OF TRAFFIC AND DETOUR SIGNAGE, SEE SHEET S14.
- FOR ESTIMATED QUANTITIES SEE SHEET S2.



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PLAN, ELEVATION
AND GENERAL
NOTES

S1

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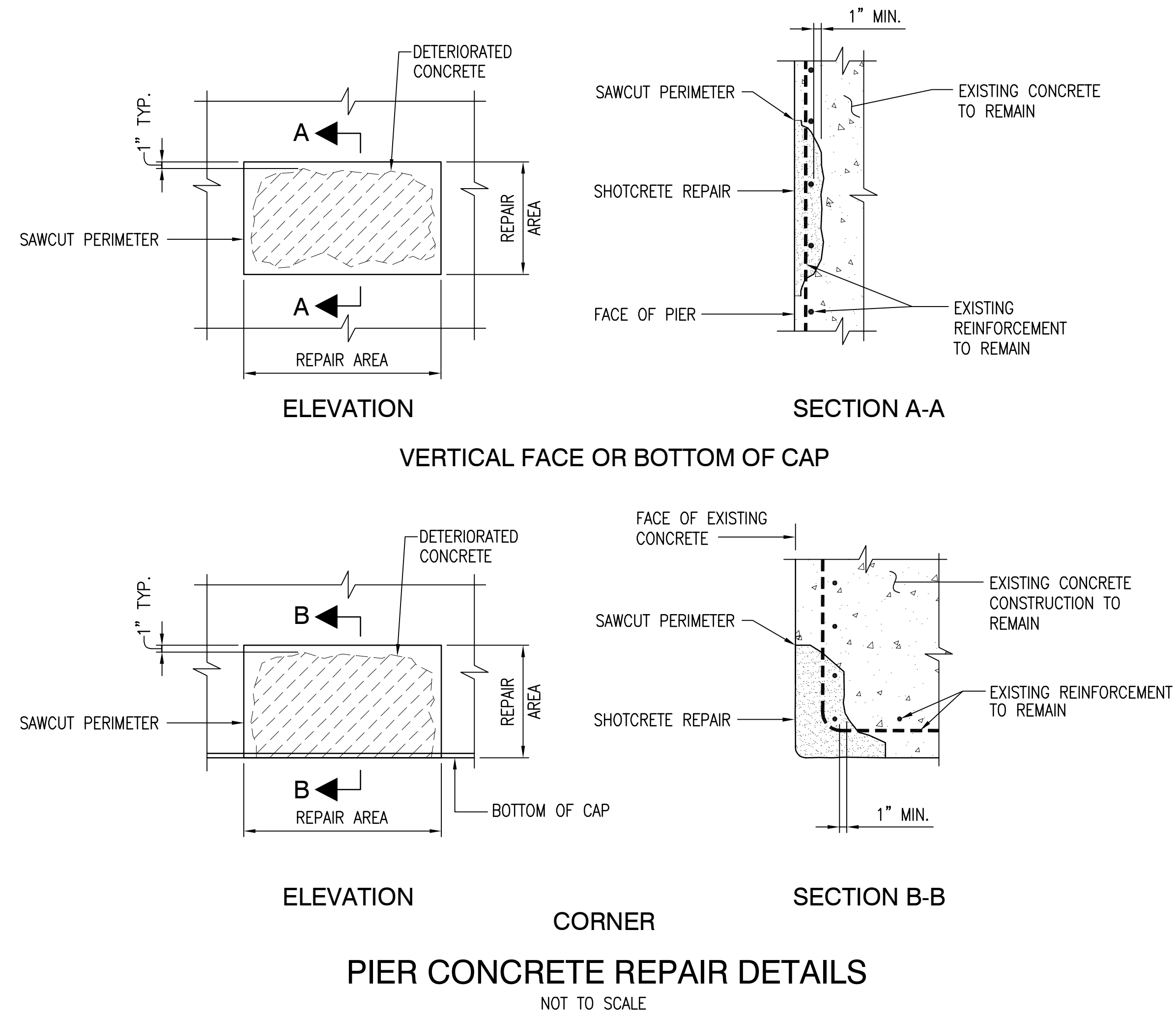
LEGEND

INDICATES PIER CONCRETE REPAIR LOCATION

PIER 1
NOT TO SCALE

PIER CONCRETE REPAIR NOTES:

- ALL PIER CONCRETE REPAIRS SHALL BE MADE WITH SHOTCRETE IN ACCORDANCE WITH SECTION 412.03 (f) OF VDOT ROAD AND BRIDGE SPECIFICATIONS.
- HATCHED AREAS SHOWN ON PLANS INDICATE APPROXIMATE LIMITS OF SPALLED, DELAMINATED OR DETERIORATED CONCRETE WHICH ARE TO BE REPAIRED.
- THE CONTRACTOR SHALL VERIFY, MARK AND RECORD THE EXTENT OF THE REPAIR LOCATIONS SHOWN ON THESE PLANS AND SUBMIT THEM TO THE ENGINEER FOR APPROVAL.
- THE DEPTH OF SHOTCRETE REPAIRS SHALL EXTEND AT LEAST 1" PAST THE PRIMARY REINFORCING STEEL OR TO SOUND CONCRETE MATRIX WHICHEVER IS GREATER. THE DEPTH AND EXTENT OF REPAIRS SHALL BE AS DIRECTED BY THE ENGINEER.
- THE PERIMETER OF THE AREAS TO BE REPAIRED SHALL BE SAWCUT 1/2" DEEP MINIMUM.
- THE REPAIR SURFACE SHALL HAVE A SPONGE FINISH AND BE FLUSH WITH THE SURROUNDING CONCRETE SURFACES.
- SHOTCRETE PROVIDED SHALL CONFORM TO SECTION 412, CLASS A OF VDOT ROAD AND BRIDGE SPECIFICATIONS, AND BE REINFORCED WITH SYNTHETIC FIBERS.
- FOR LOCATION OF PIER CONCRETE REPAIRS, SEE SHEETS S2 THRU S8.
- THE CONTRACTOR SHALL LIMIT THE AMOUNT OF OVERSPRAY AND DUSTING TO SURROUNDING ELEMENTS OF THE STRUCTURE. ANY ADJACENT SURFACE COVERED SHALL BE CLEANED BEFORE OVERSPRAY HARDENS.



ESTIMATED QUANTITIES

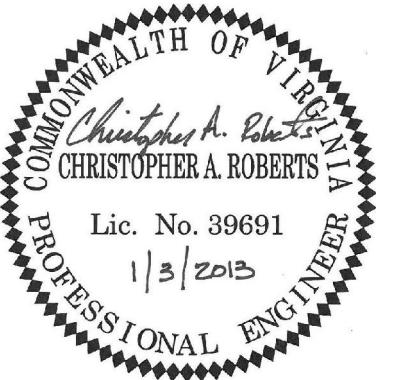
	SHOTCRETE CLASS A	RAPID CURE SILICONE JOINT SEALANT CLASS D	BEARING REPLACEMENT *	JACKING AND BLOCKING	REPAIR/REPLACE BEARING STIFFENER	CLEAN AND REPLACE EXPANSION JOINT SEAL	CONCRETE SURFACE PENETRANT SEALER	TEMPORARY SAFETY FENCE
	SF	LF	EA	EA	EA	LF	SY	LF
SUPERSTRUCTURE	1103	563	—	—	15	245	3002	—
ABUTMENT A	—	—	12	12	—	—	—	—
PIER 1	21	—	—	—	—	—	—	—
PIER 2	36	—	—	—	—	—	—	—
PIER 3	140	—	—	—	—	—	—	100
PIER 4	251	—	24	24	—	—	—	100
PIER 5	98	—	—	—	—	—	—	—
PIER 6	16	—	—	—	—	—	—	—
PIER 7	—	—	—	—	—	—	—	—
ABUTMENT B	—	—	12	12	—	—	—	—
TOTAL	1665	563	48	48	15	245	3002	200

MOBILIZATION - LUMP SUM
RECOAT EXISTING STRUCTURE (TYPE B) - LUMP SUM
ENVIRONMENTAL PROTECTION AND HEALTH AND SAFETY (TYPE B) - LUMP SUM
DISPOSAL OF MATERIAL (TYPE B) - LUMP SUM
MAINTENANCE OF TRAFFIC - LUMP SUM

* INCLUDES REMOVAL AND DISPOSAL OF EXISTING BEARING ASSEMBLIES, ANCHOR BOLTS AND INSTALLATION OF NEW BEARING ASSEMBLIES INCLUDING FABRICATED HAUNCH, ELASTOMERIC BEARINGS, SOLE PLATES AND ANCHOR BOLTS AS SHOWN ON THESE PLANS IN ACCORDANCE WITH SECTIONS 408 AND 413 OF THE SPECIFICATIONS. THIS ITEM SHALL INCLUDE ALL MATERIALS, TOOLS, LABOR, EQUIPMENT AND INCIDENTALS REQUIRED TO COMPLETE THE WORK.

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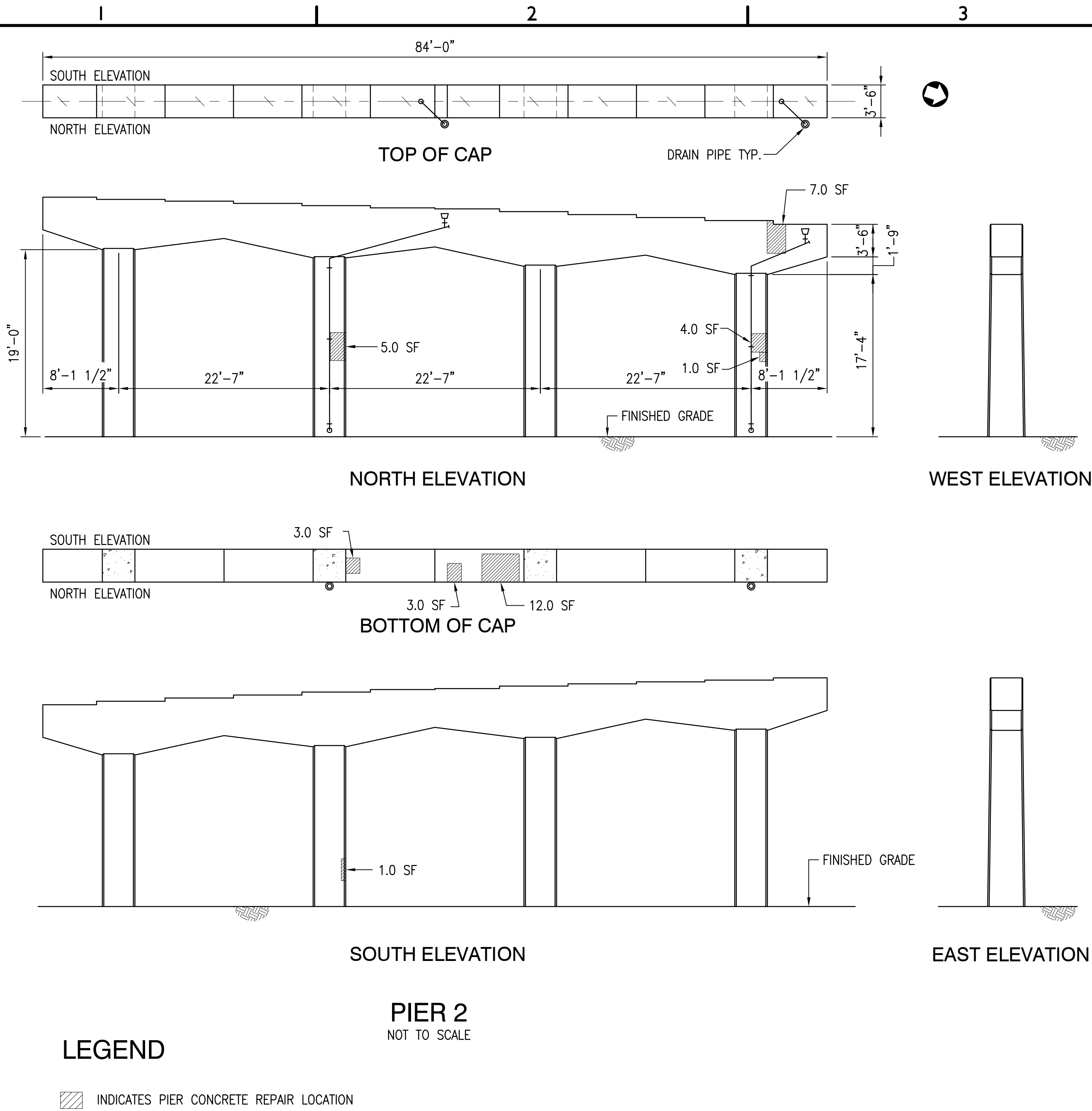
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**PIER 1 DETAILS &
CONCRETE
REPAIR NOTES**

S2

SHEET 3 OF 15

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LEGEND

 INDICATES PIER CONCRETE REPAIR LOCATION

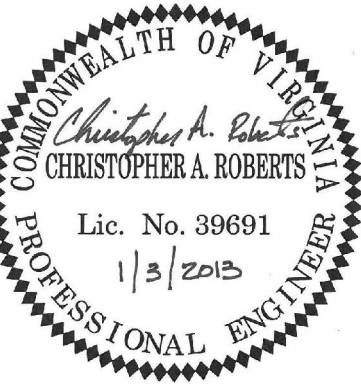
NOTES:

FOR PIER CONCRETE REPAIR DETAILS, SEE SHEET S2.

PIER 2
NOT TO SCALE

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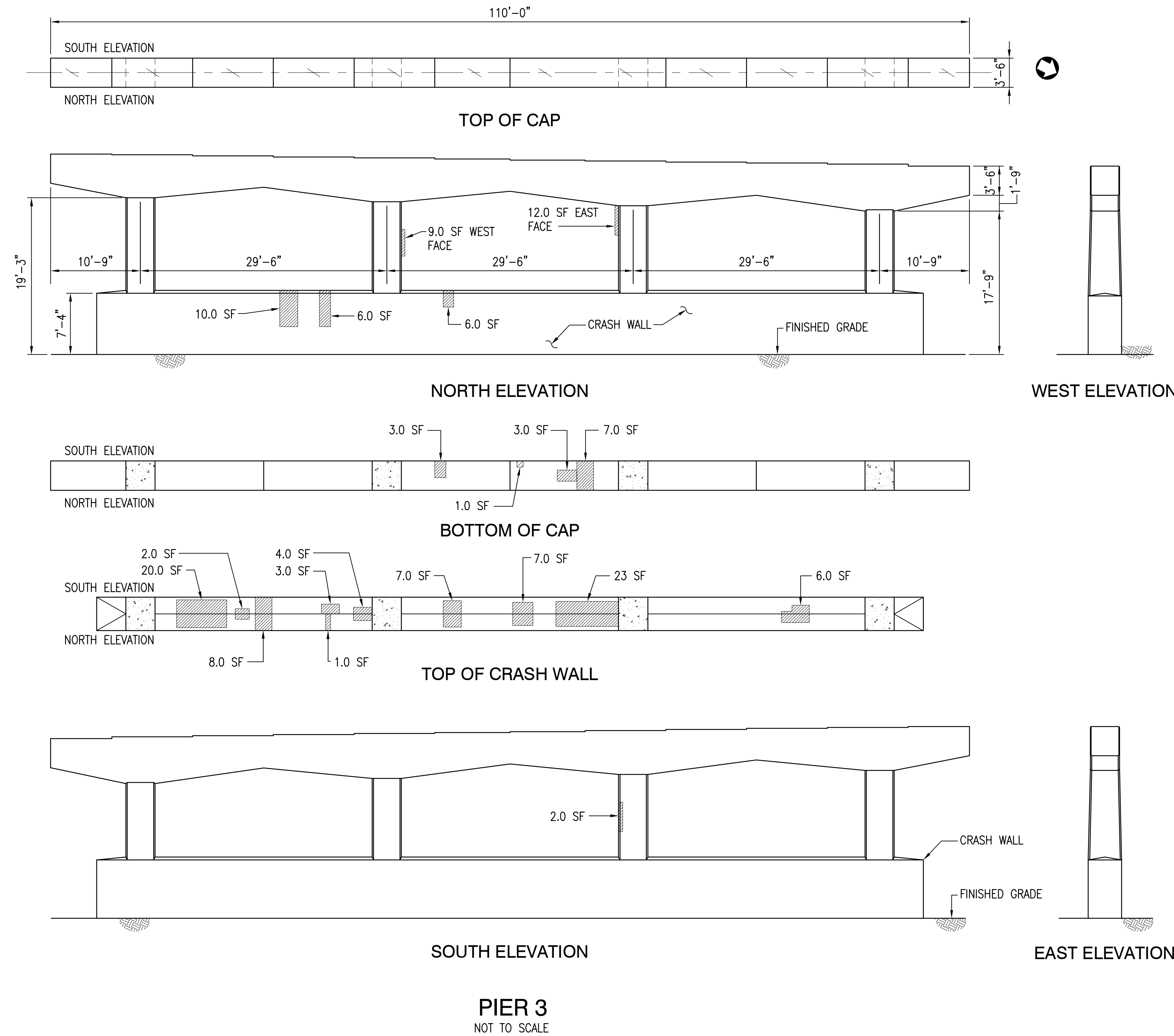
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No.	Date	Description

PIER 2 DETAILS

S3

SHEET 4 OF 15

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LEGEND

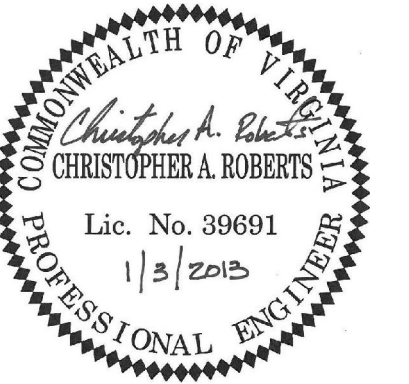
INDICATES PIER CONCRETE REPAIR LOCATION

NOTES:

FOR PIER CONCRETE REPAIR DETAILS, SEE SHEET S2.

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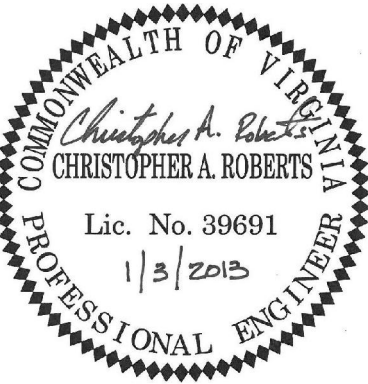
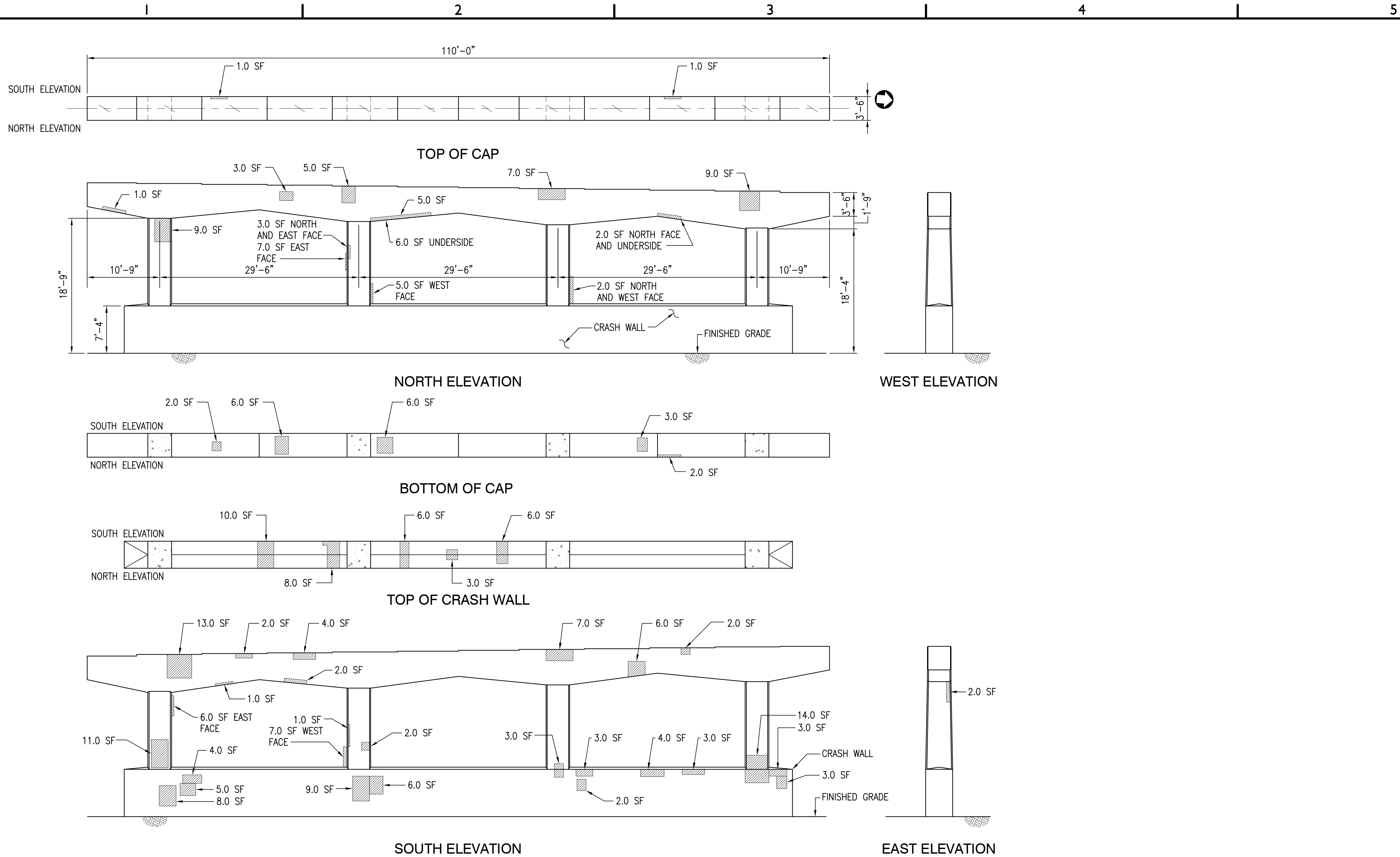
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No.	Date	Description

PIER 3 DETAILS

S4

SHEET 5 OF 15

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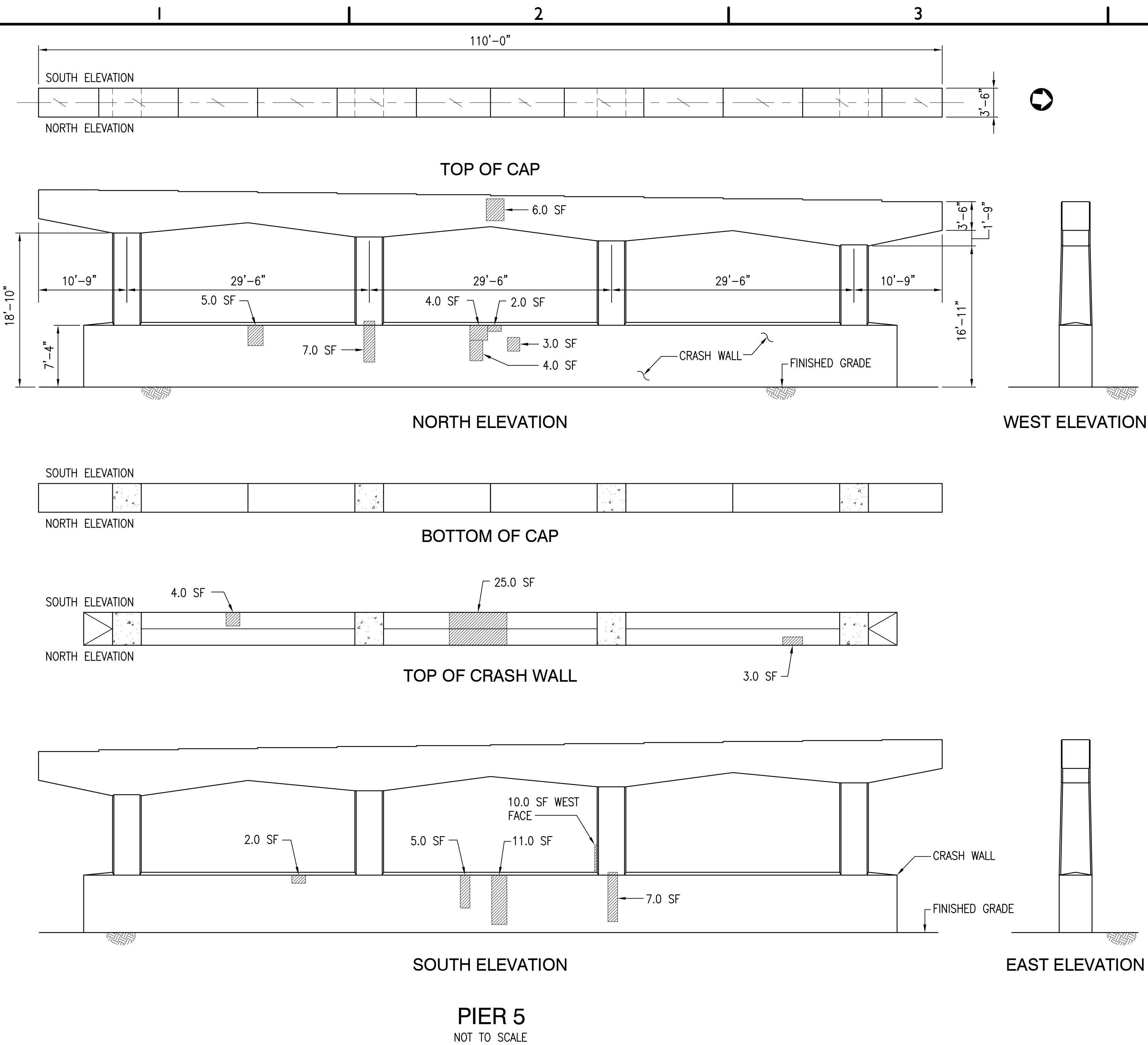
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PIER 4 DETAILS

S5

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PIER 5
NOT TO SCALE

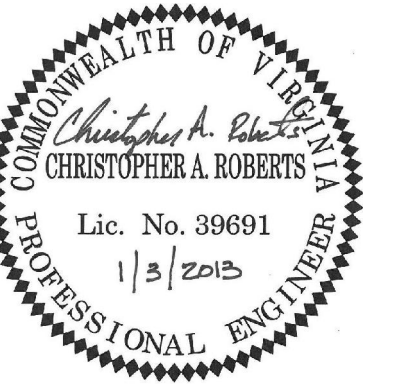
LEGEND

INDICATES PIER CONCRETE REPAIR LOCATION

NOTES:
FOR PIER CONCRETE REPAIR DETAILS, SEE SHEET S2.

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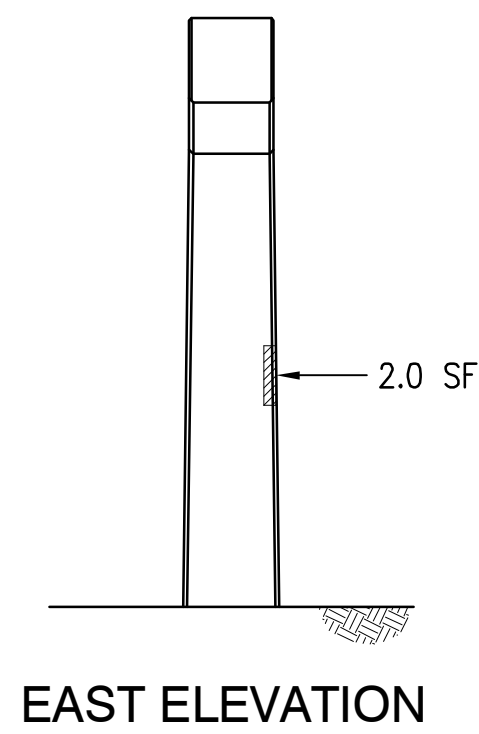
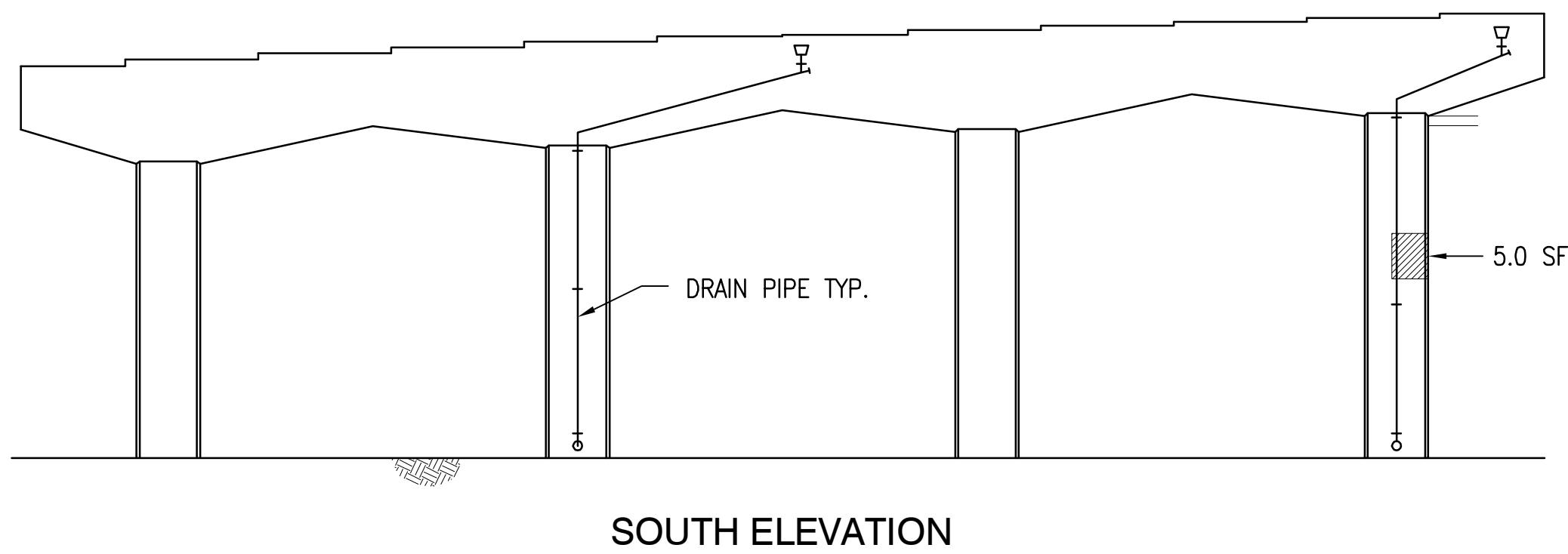
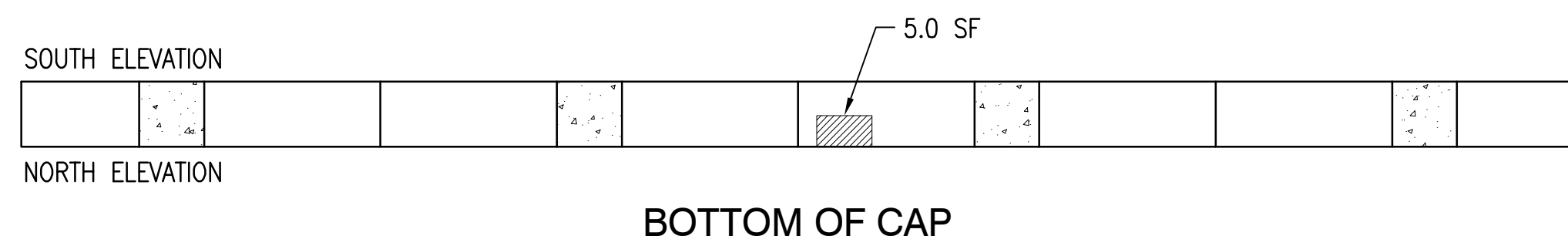
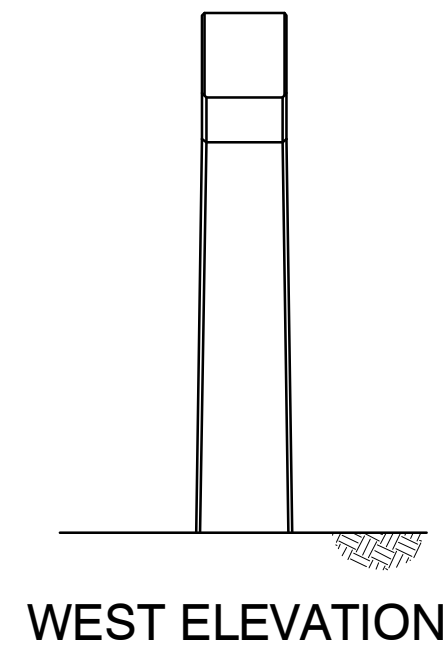
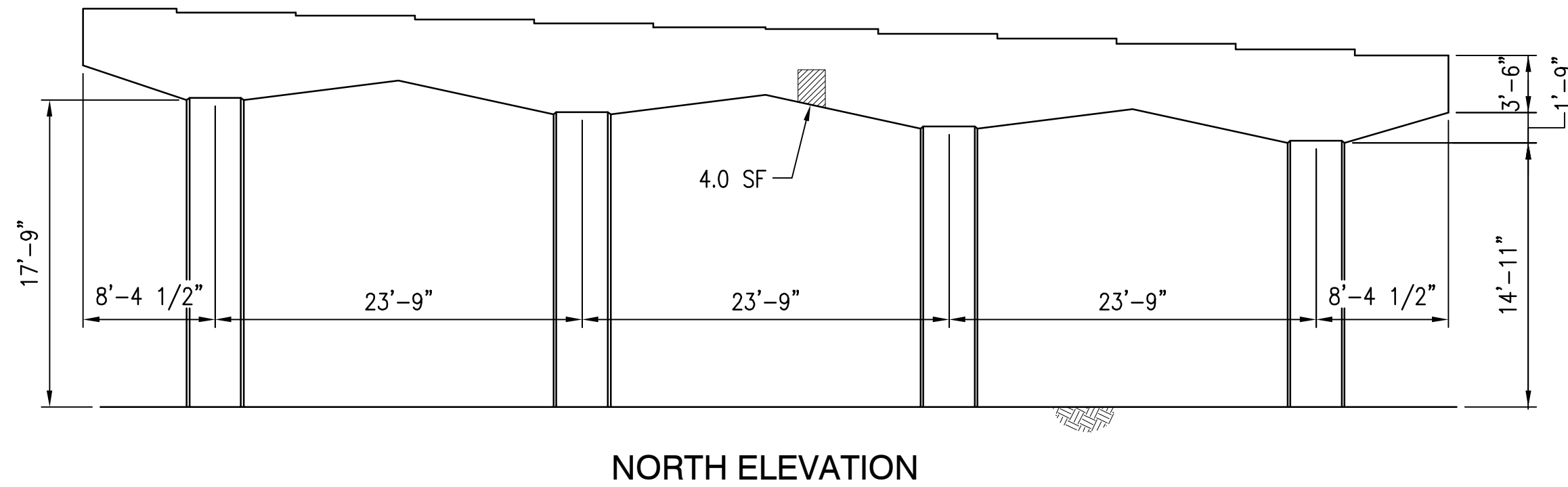
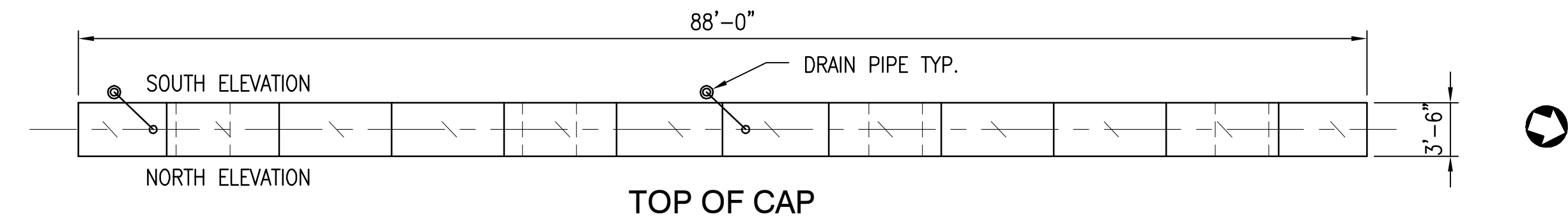
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PIER 5 DETAILS

S6

SHEET 7 OF 15

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PIER 6
NOT TO SCALE

LEGEND

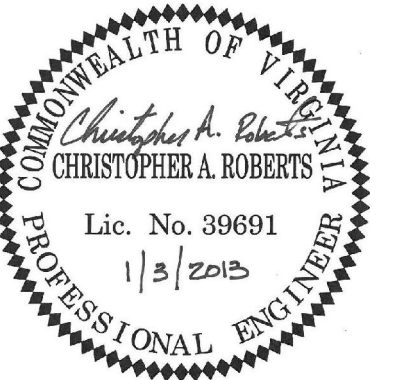
INDICATES PIER CONCRETE REPAIR LOCATION

NOTES:

FOR PIER CONCRETE REPAIR DETAILS, SEE SHEET S2.

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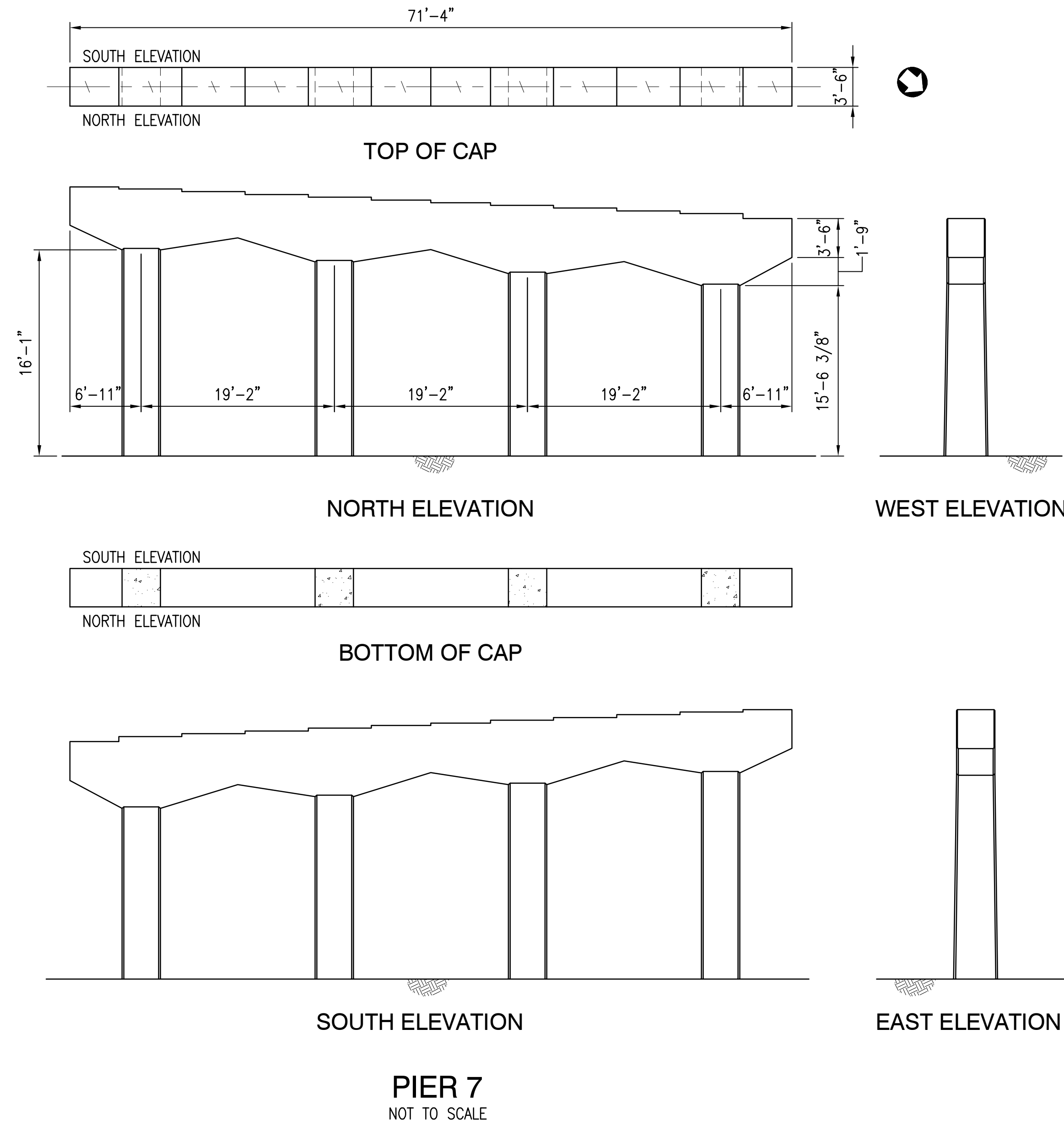
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PIER 6 DETAILS

S7

SHEET 8 OF 15

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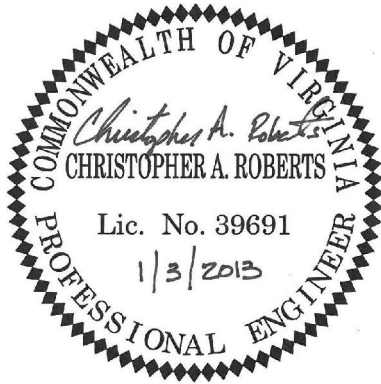
LEGEND

INDICATES PIER CONCRETE REPAIR LOCATION

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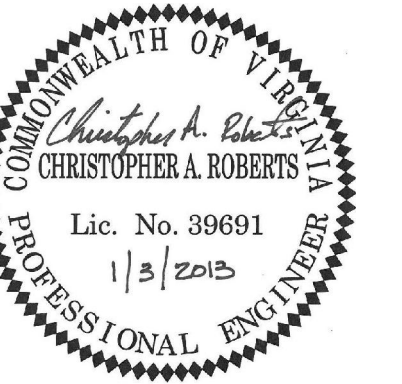
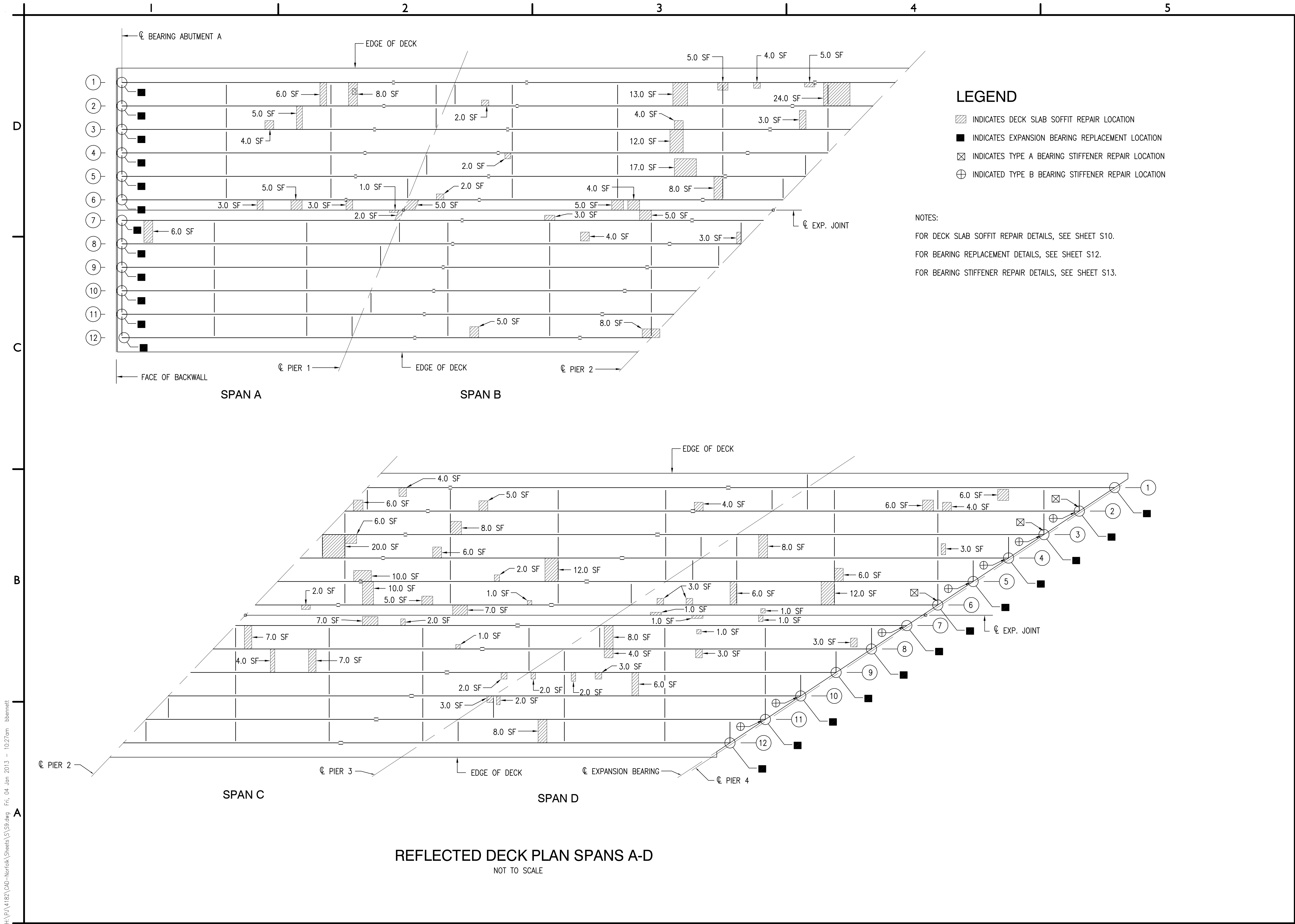
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PIER 7 DETAILS

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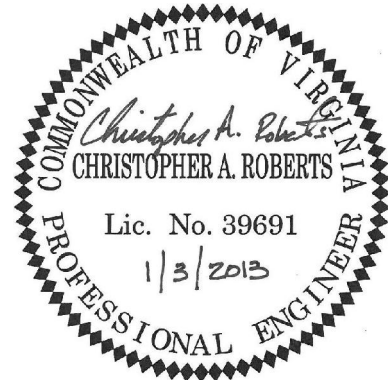


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**REFLECTED
DECK PLAN
SPANS A-D**

S9



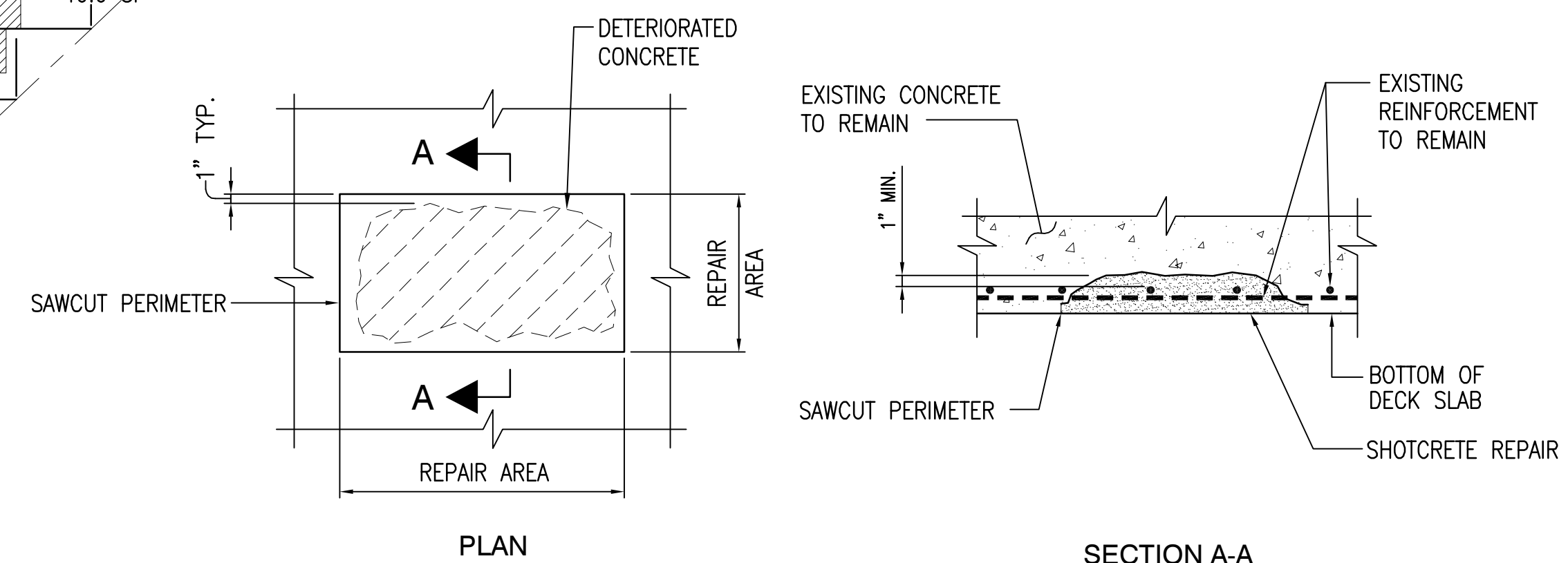
LEGEND

- INDICATES DECK SLAB SOFFIT REPAIR LOCATION
- INDICATES EXPANSION BEARING REPLACEMENT LOCATION
- INDICATES TYPE A BEARING STIFFENER REPAIR LOCATION
- INDICATED TYPE B BEARING STIFFENER REPAIR LOCATION

NOTES:

FOR BEARING REPLACEMENT DETAILS, SEE SHEET S12.

FOR BEARING STIFFENER REPAIR DETAILS, SEE SHEET S13.

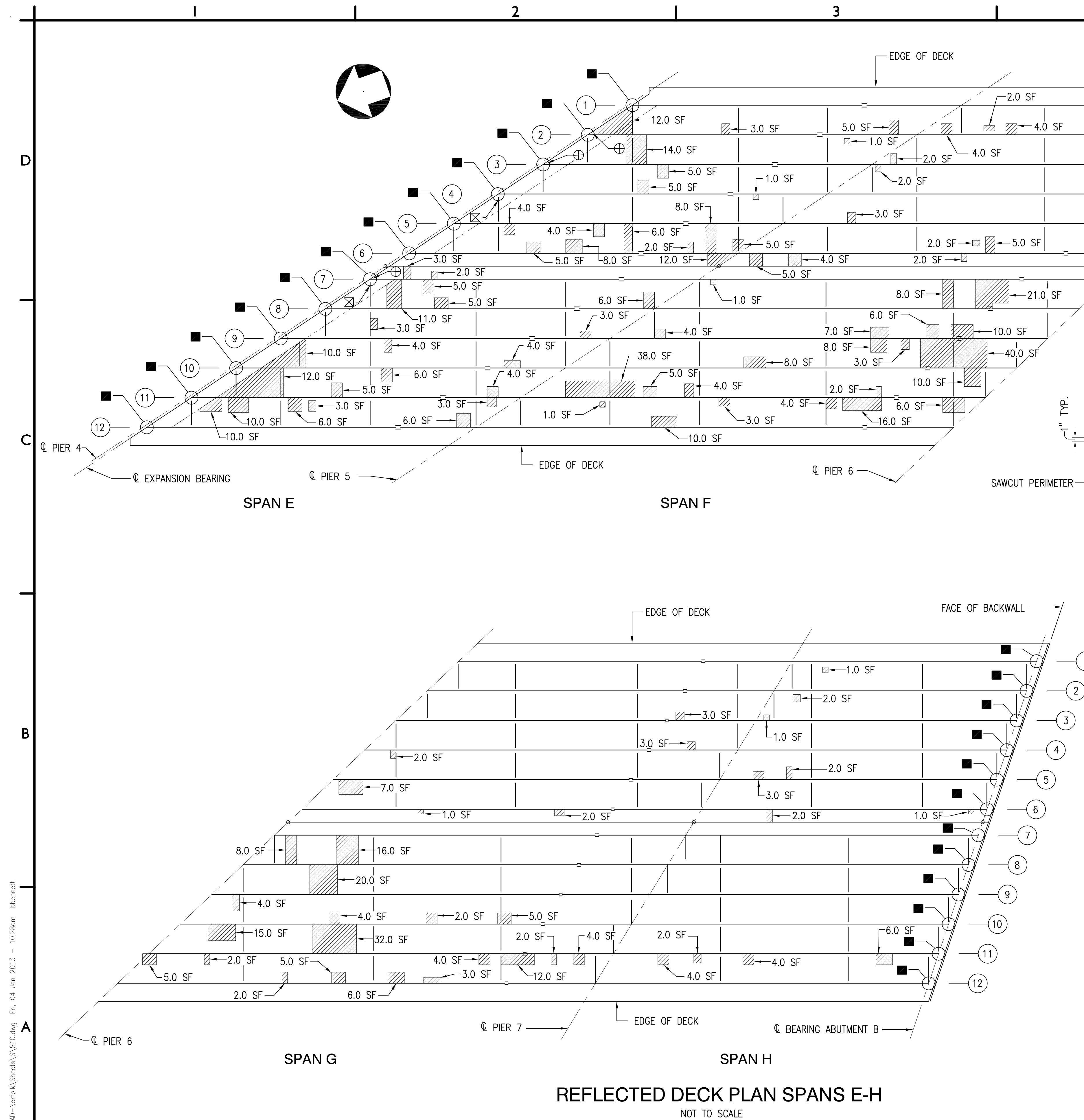


DECK SLAB SOFFIT REPAIR DETAILS

NOT TO SCALE

DECK SLAB SOFFIT REPAIR NOTES:

- ALL DECK SLAB SOFFIT CONCRETE SURFACE REPAIRS SHALL BE MADE WITH SHOTCRETE IN ACCORDANCE WITH SECTION 412.03 (f) OF VDOT ROAD AND BRIDGE SPECIFICATIONS.
- THE CONTRACTOR SHALL VERIFY, MARK AND RECORD THE EXTENT OF THE REPAIR LOCATIONS SHOWN ON THESE PLANS AND SUBMIT THEM TO THE ENGINEER FOR APPROVAL.
- THE DEPTH OF SHOTCRETE REPAIRS SHALL EXTEND AT LEAST 1" PAST THE PRIMARY REINFORCING STEEL OR TO SOUND CONCRETE MATRIX WHICHEVER IS GREATER. THE DEPTH AND EXTENT OF REPAIRS SHALL BE AS DIRECTED BY THE ENGINEER.
- THE PERIMETER OF THE AREAS TO BE REPAIRED SHALL BE SAWCUT 1/2" DEEP MINIMUM. THE EXISTING DRAWINGS INDICATE BOTTOM REINFORCING BARS HAVE A 1 1/4" CLEARANCE FROM THE BOTTOM OF DECK SLAB. THE CONTRACTOR SHALL TAKE CARE AND ADJUST DEPTH OF THE SAWCUT SO NO REINFORCING BARS ARE CUT.
- THE FINISHED REPAIR SURFACE SHALL BE FLUSH WITH THE SURROUNDING CONCRETE SURFACES AND HAVE A SPONGE FINISH.
- SHOTCRETE PROVIDED SHALL CONFORM TO SECTION 412, CLASS A OF VDOT ROAD AND BRIDGE SPECIFICATIONS, AND BE REINFORCED WITH SYNTHETIC FIBERS.
- FOR LOCATION OF DECK SLAB SOFFIT REPAIRS, SEE SHEETS S9 AND S10.
- THE CONTRACTOR SHALL LIMIT THE AMOUNT OF OVERSPRAY AND DUSTING TO SURROUNDING ELEMENTS OF THE STRUCTURE. ANY ADJACENT SURFACE COVERED SHALL BE CLEANED BEFORE OVERSPRAY HARDENS.



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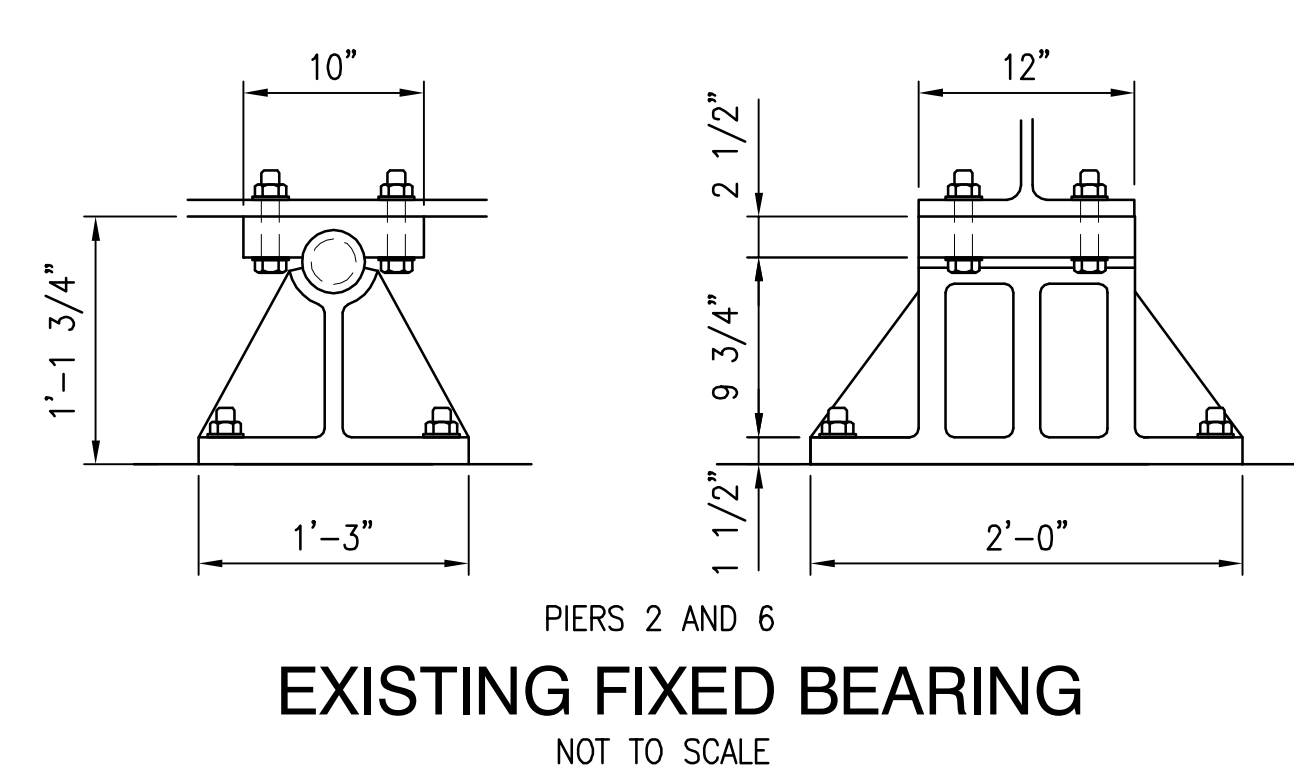
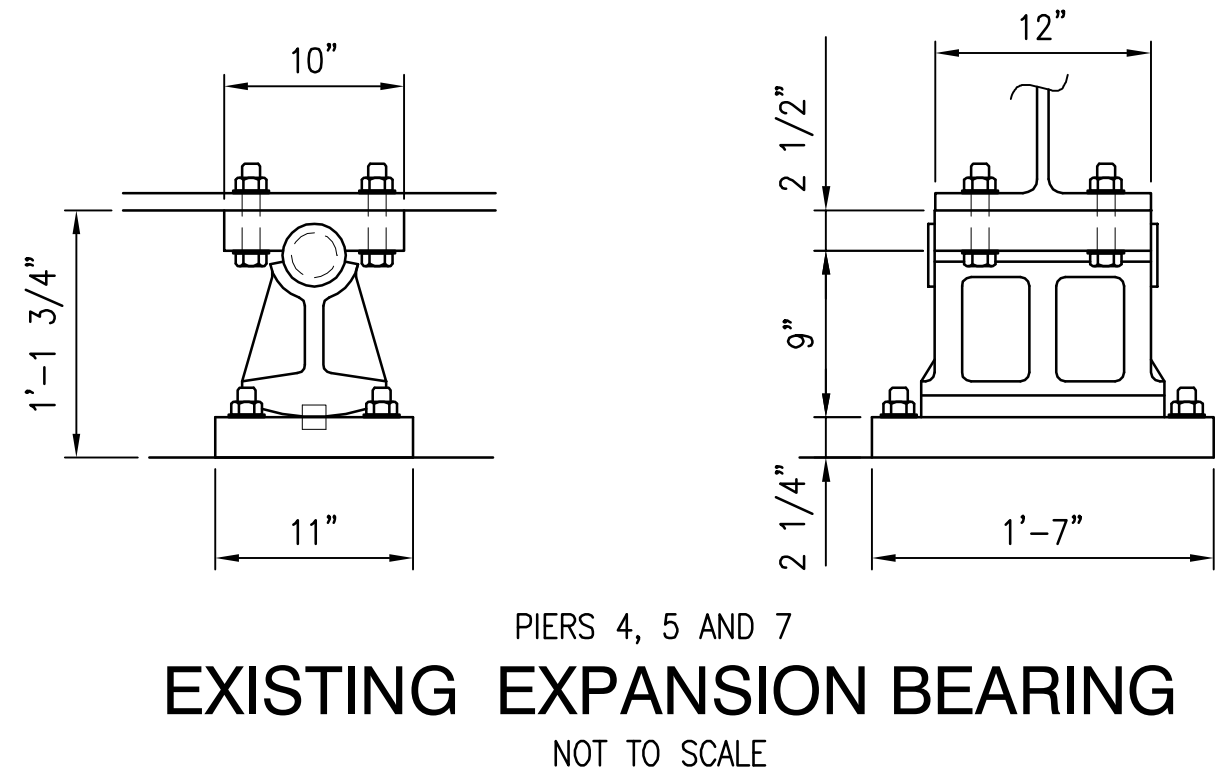
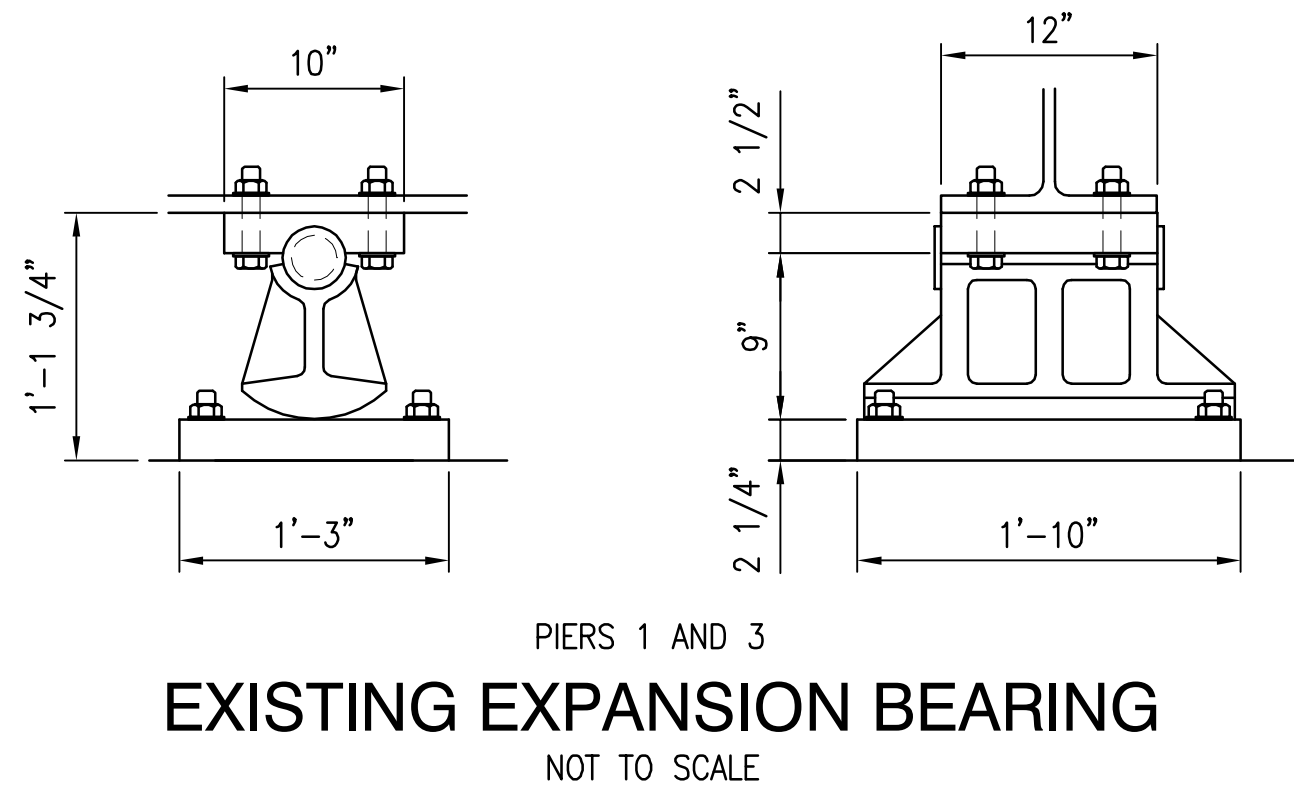
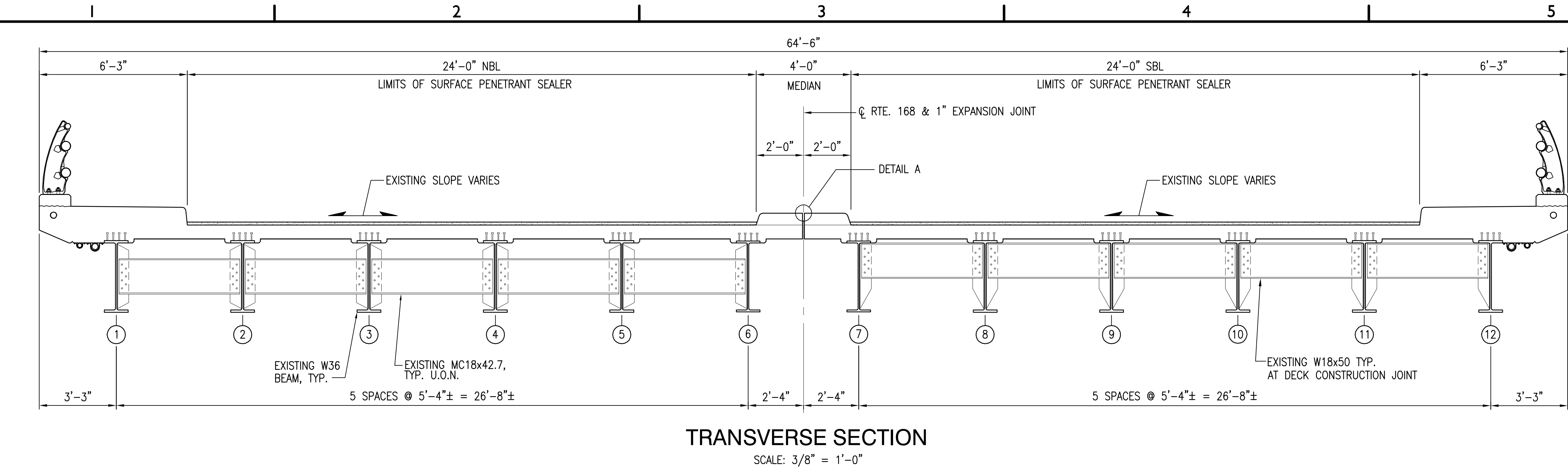
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REFLECTED DECK PLAN SPANS E-H

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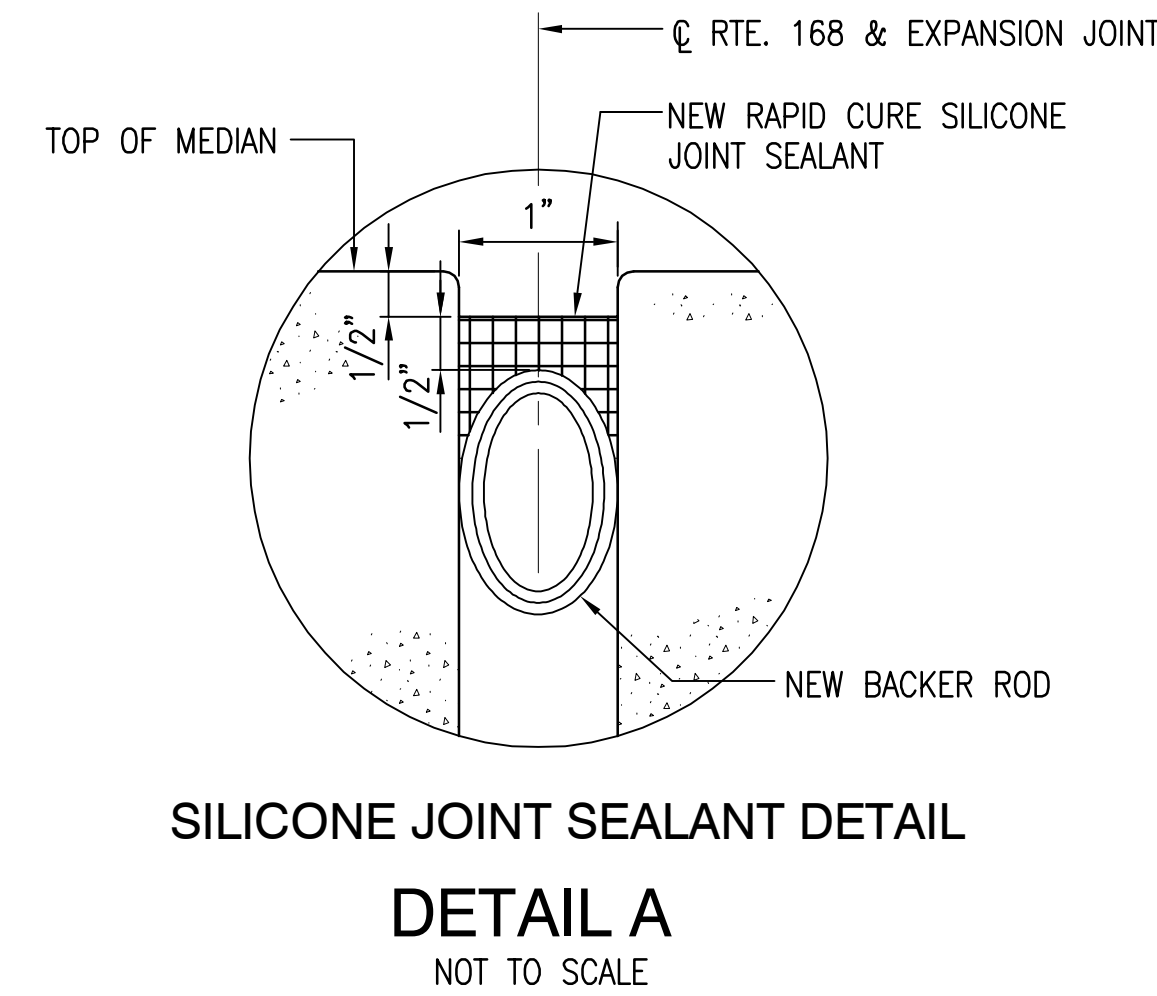


CLEANING AND RECOATING NOTES:

- ALL STEEL SURFACES ARE TO BE CLEANED AND RECOATED IN ACCORDANCE WITH VDOT ROAD AND BRIDGE SPECIFICATIONS SECTION 411 INCLUDING MAIN BEAMS, DIAPHRAGMS, STIFFENERS AND BEARING ASSEMBLIES INCLUDING MASONRY PLATES AS WELL AS NEW BEARING ASSEMBLIES AT ABUTMENTS AND PIER 4. DO NOT CLEAN AND COAT GALVANIZED DRAIN PIPES.
- THE TRANSVERSE SECTION ABOVE, EXISTING BEARING DETAILS AND REFLECTED DECK PLANS SHOW THE BASIC LAYOUT AND SIZE OF THE ELEMENTS TO BE CLEANED AND RECOATED. THE CONTRACTOR SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH THE EXISTING STRUCTURE PRIOR THE BEGINNING RECOATING OPERATIONS.
- CARE SHALL BE TAKEN TO MINIMIZE OVER SPRAY ON EXISTING CONCRETE SURFACES AND BEARING PADS. DO NOT PAINT AREA OF SOLE PLATE IN CONTACT WITH ELASTOMERIC BEARING PAD.
- CLEANING AND RECOATING OPERATIONS SHALL BEGIN ONLY AFTER ALL CONCRETE REPAIRS, STEEL REPAIRS AND BEARING REPLACEMENTS HAVE BEEN COMPLETED.
- THE EXISTING STRUCTURE IS DESIGNATED A TYPE B STRUCTURE IN ACCORDANCE WITH VDOT ROAD AND BRIDGE SPECIFICATION SECTION 411.
- FINISHED PAINT COLOR SHALL BE GRAY, 595-26373.
- THE EXISTING NORFOLK AND SOUTHERN RAILWAY SHALL REMAIN IN SERVICE DURING THE CLEANING AND RECOATING OPERATIONS. THE CONTRACTOR SHALL COORDINATE WITH NORFOLK AND SOUTHERN RAILROAD PRIOR TO BEGINNING ANY WORK INSIDE THE RAILROAD RIGHT OF WAY IN ACCORDANCE WITH SPECIAL PROVISIONS FOR PROTECTION OF RAILWAY INTERESTS..
- THE EXISTING ROADWAYS UNDER THE BRIDGE SHALL REMAIN IN SERVICE DURING THE CLEANING AND RECOATING OPERATIONS. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY VEHICLE PROTECTION REQUIRED DURING THE CLEANING AND RECOATING OPERATION. SHOULD THE CONTRACTOR ELECT TO PROVIDE TRAFFIC CONTROL HE SHALL SUBMIT A TRAFFIC CONTROL PLAN FOR APPROVAL BY THE ENGINEER.
- THE CONTRACTOR SHALL PROVIDE ALL ENVIRONMENTAL AND WORKER PROTECTION REQUIRED FOR THE STRUCTURE CLEANING AND RECOATING.
- THE CONTRACTOR SHALL PROPERLY DISPOSE OF ALL MATERIALS FROM THE CLEANING AND RECOATING OPERATIONS.

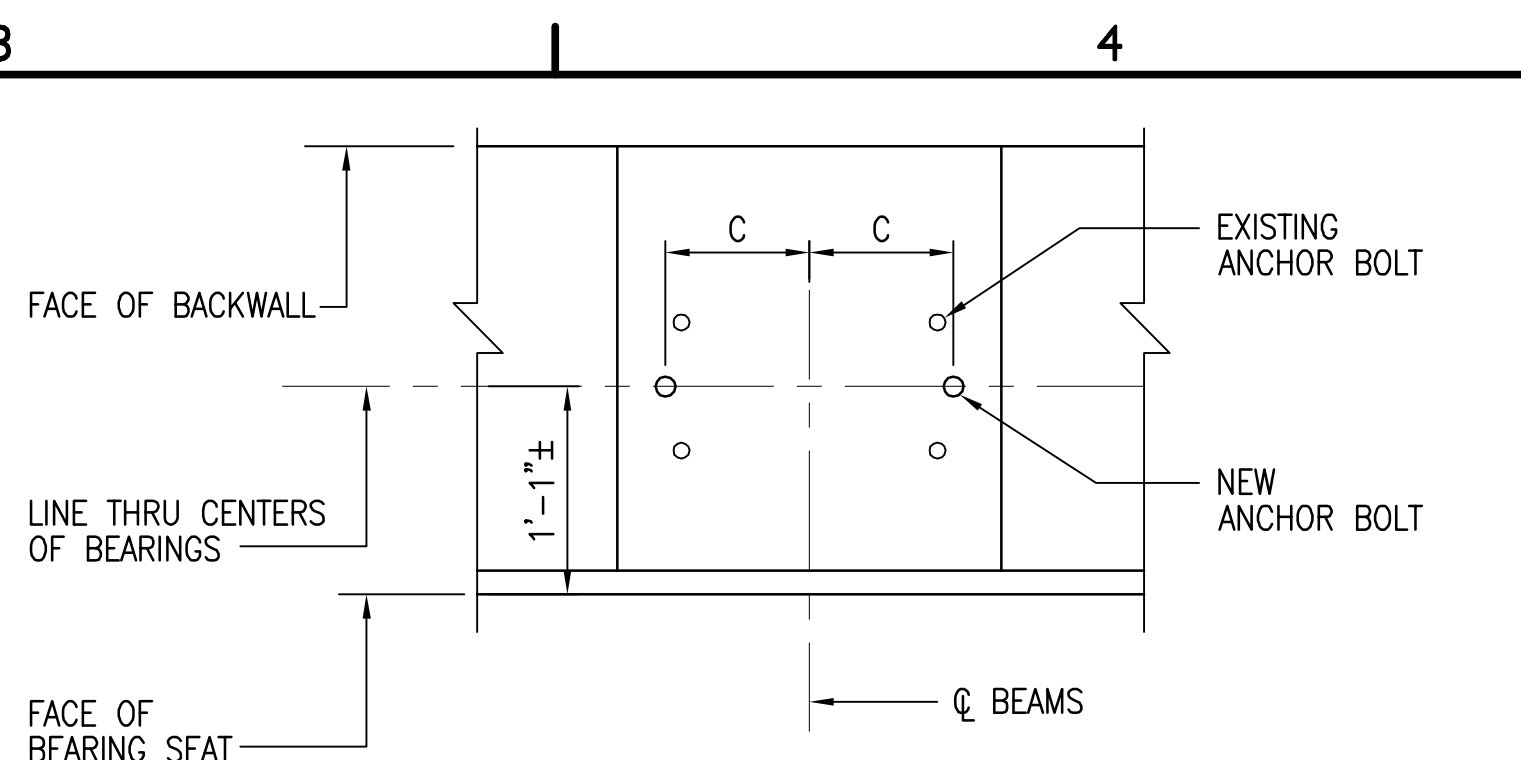
SURFACE PENETRANT SEALER NOTES:

- THE COLOR OF THE PENETRANT SEALER SHALL BE CLEAR.
- THE PENETRANT SEALER SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, EXCEPT AS OTHERWISE SPECIFIED HEREIN.
- ALL SURFACES TO RECEIVE THE PENETRANT SEALER SHALL BE SANDBLASTED TO PROVIDE A CLEAN UNIFORM TEXTURE FREE OF FOREIGN SUBSTANCES SUCH AS OILS, RELEASE AGENTS, CURING AGENTS OR EFFLORESCENCE. ALL SANDBLASTING RESIDUE SHALL BE COMPLETELY REMOVED PRIOR TO APPLICATION OF THE PENETRANT SEALER.
- THE RATES OF APPLICATION AND NUMBER OF COATS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- SEE PLAN ON SHEET S1 AND TRANSVERSE SECTION FOR LIMITS OF SURFACE PENETRANT SEALER.



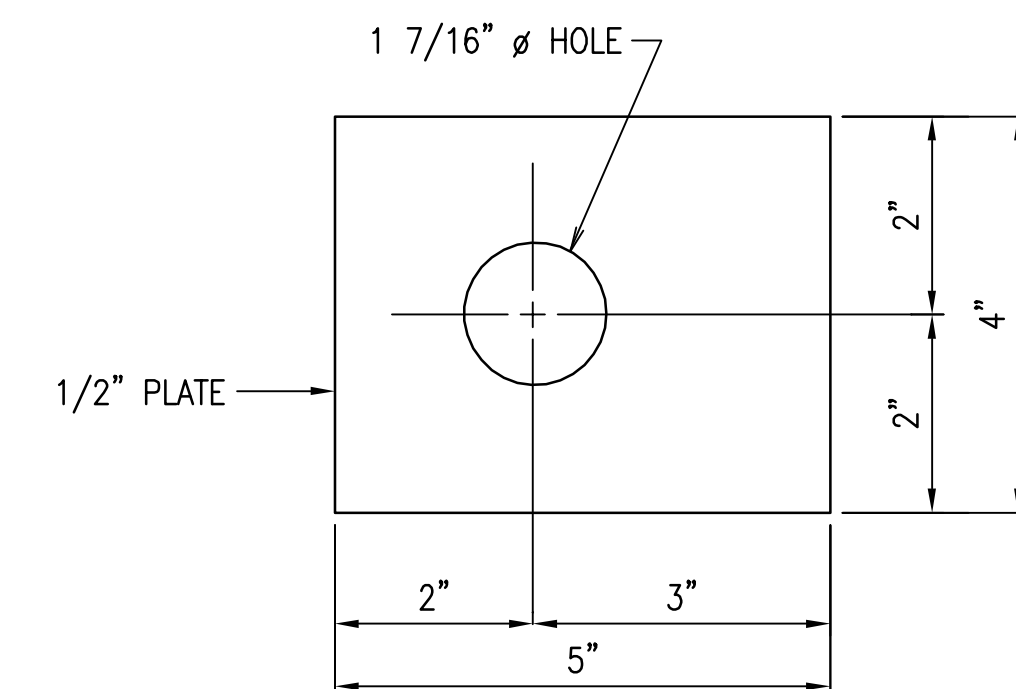
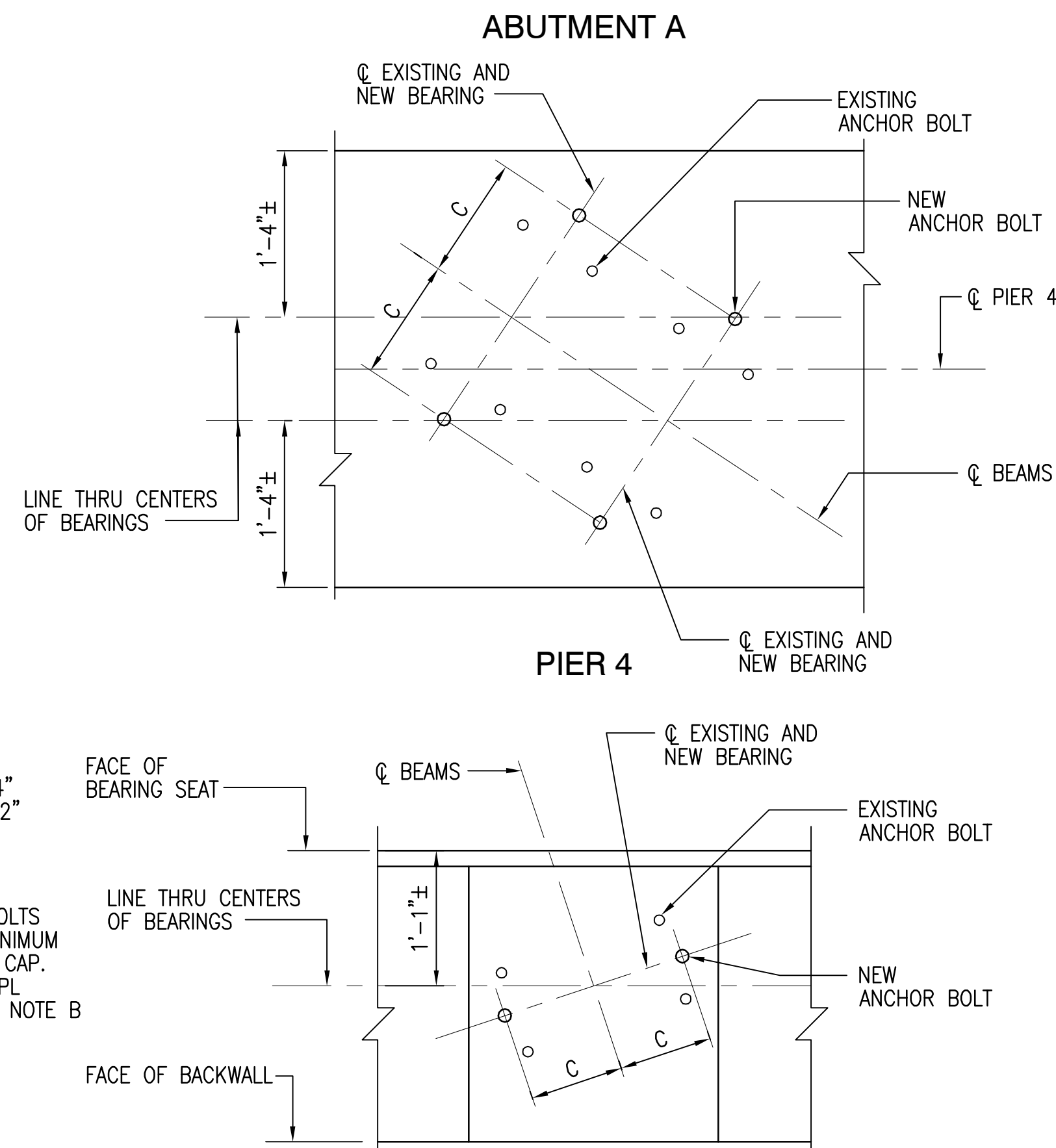
SILICONE JOINT SEALANT NOTES:

- RAPID CURE SILICONE JOINT SEALANT SHALL BE CLASS D IN ACCORDANCE WITH SPECIAL PROVISIONS FOR SEALING EXPANSION JOINTS. JOINT SEALANT SHALL BE DOW CORNING 902 RCS OR APPROVED EQUAL.
- PRIOR TO APPLYING THE PRIMER FOR THE SEALANT, JOINT SHALL BR FREE OF CRACKED OR SPALLED AREAS, ALL FOREIGN MATTER, OILS, GREASE AND ANY OTHER DEBRIS. ALL FACES SHALL BE ABRASIVELY BLASTED OR BRUSHED WITH A MECHANICAL ROTARY BRUSH. JUST PRIOR TO INSTALLING PRIMER FOR SEALANT, THE JOINTS SHALL BE CLEANED WITH OIL AND WATER FREE COMPRESSED AIR.
- THE MANUFACTURER'S REQUIREMENTS FOR INSTALLATION OF SEALANT SHALL BE USED IF MORE STRICT THAN THOSE INDICATED ABOVE, OR IF ANY REQUIREMENTS IN THIS SHEET CONFLICTS WITH THE MANUFACTURER'S REQUIREMENTS FOR PROPER INSTALLATION WITH APPROVAL OF THE ENGINEER.



NEW ANCHOR BOLTS SHALL CONFORM TO SECTION 408 OF THE SPECIFICATIONS, BE THE SWEDGED TYPE ANCHOR BOLTS AND SHALL BE GALVANIZED IN ACCORDANCE WITH SECTION 233 OF THE SPECIFICATIONS. THE NEW ANCHOR BOLTS SHALL BE GROUTED IN PLACE WITH AN APPROVED MATERIAL FROM THE WDOT MATERIALS LIST AND IN ACCORDANCE WITH THE SPECIFICATIONS.

COMMONWEALTH OF VIRGINIA
Christopher A. Roberts
 CHRISTOPHER A. ROBERTS
 Lic. No. 39691
 1/3/2013
 PROFESSIONAL ENGINEER



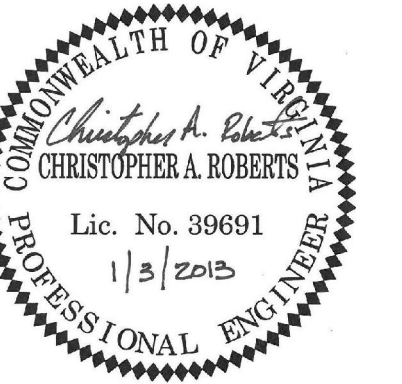
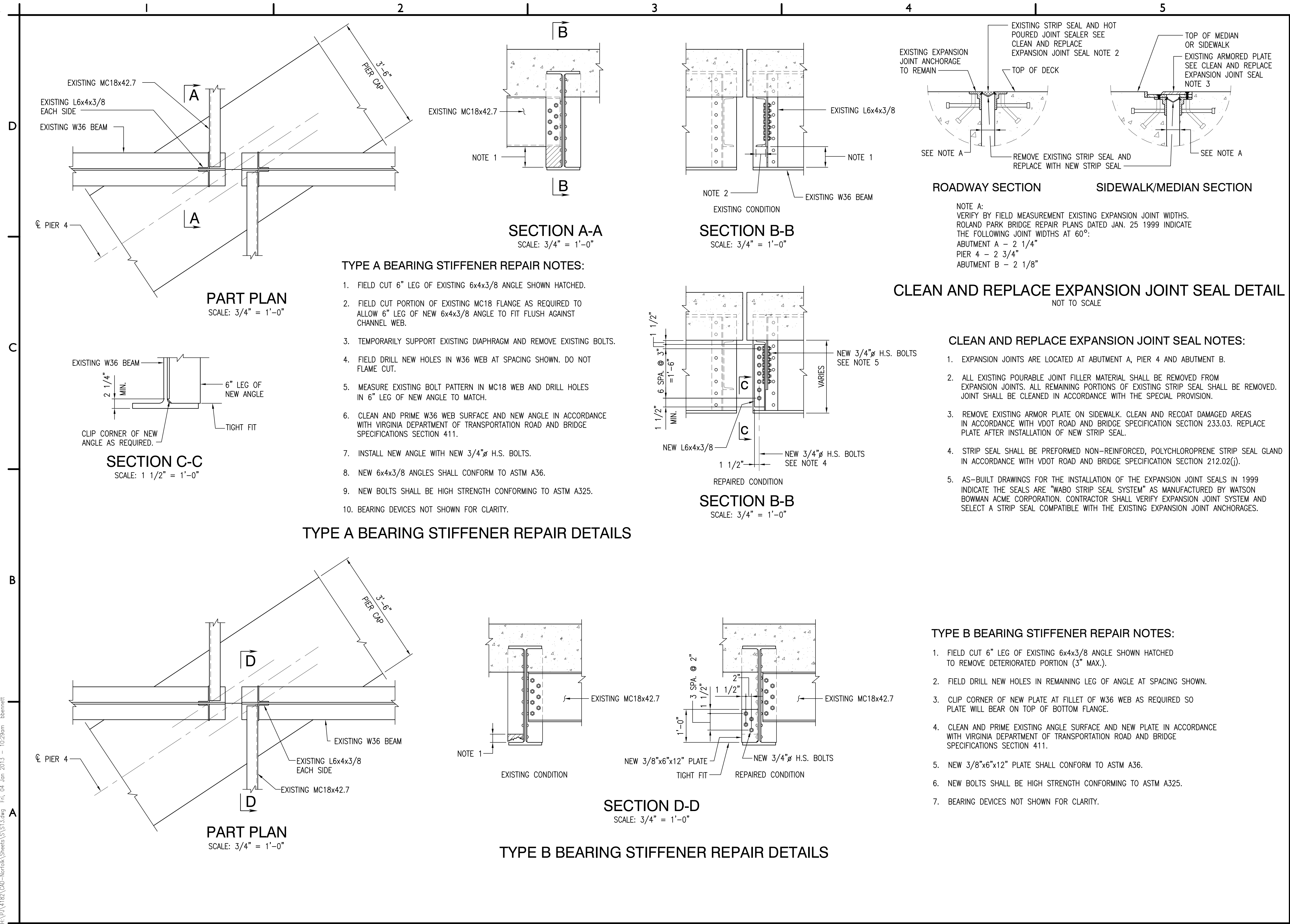
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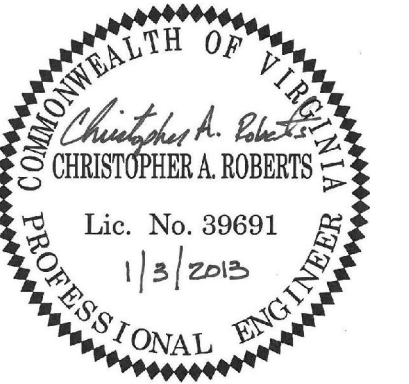
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ALL DIMENSIONS IN TABLE ARE IN INCHES

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 DATE: 01/03/12
 DESIGN: EAJ
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SHEET 15 OF 15



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ROLAND PARK OVERPASS BRIDGE RAMP IMPROVEMENTS

ADDITIVE ALTERNATE #1

NORFOLK, VIRGINIA

SITE PLAN # 12-0062

INDEX OF DRAWINGS

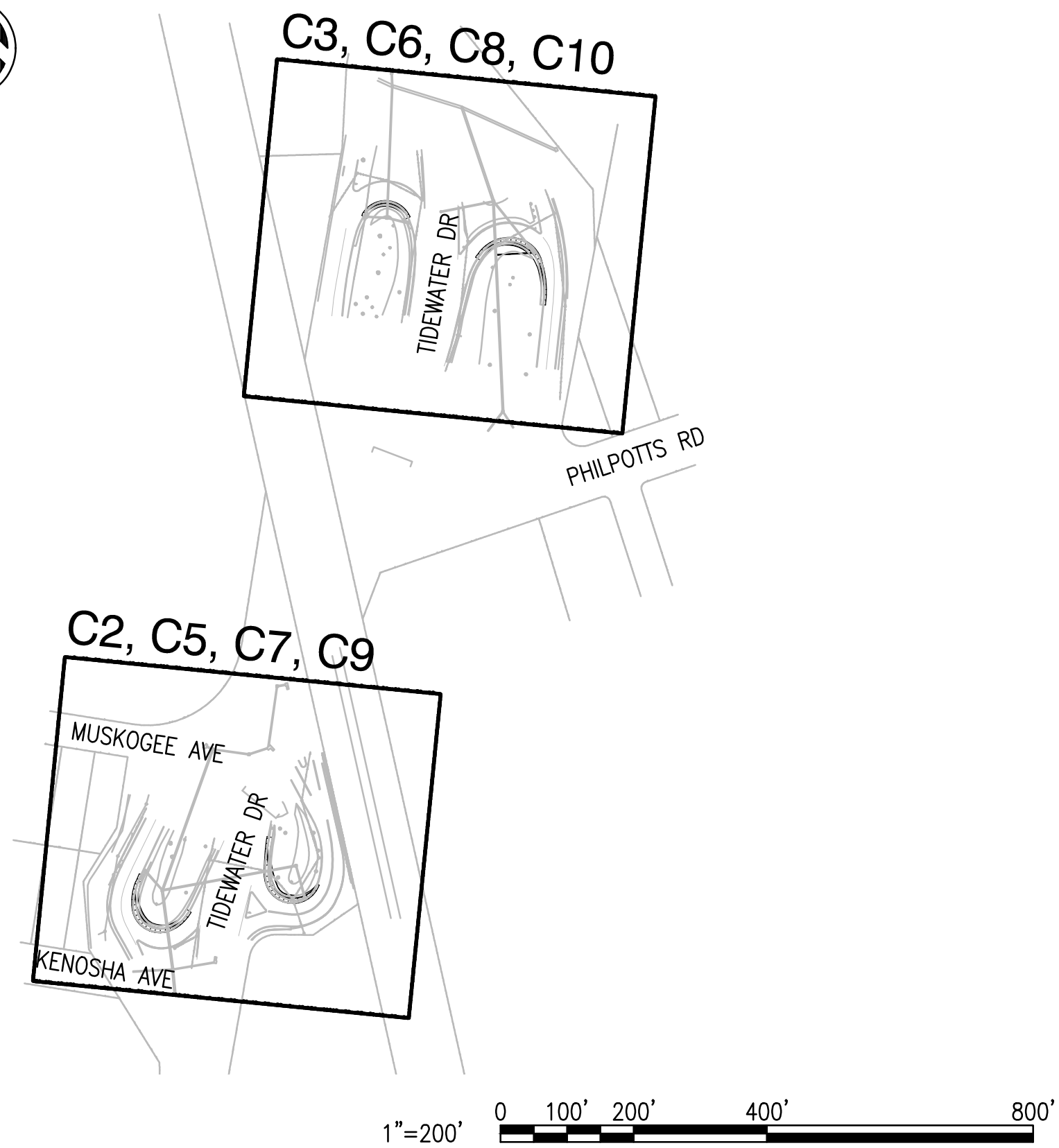
SHEET NUMBER	SHEET INDEX	SHEET TITLE
GENERAL		
GI001	1	TITLE SHEET
CIVIL		
C1	2	LEGEND GENERAL NOTES & ABBREVIATIONS
C2	3	EXISTING CONDITIONS PLAN
C3	4	EXISTING CONDITIONS PLAN
C4	5	SOIL EROSION AND SEDIMENT CONTROL NOTES AND DETAILS
C5	6	SOIL EROSION SEDIMENT CONTROL & DEMO PLAN
C6	7	SOIL EROSION SEDIMENT CONTROL & DEMO PLAN
C7	8	IMPROVEMENT & GRADING PLAN
C8	9	IMPROVEMENT & GRADING PLAN
C9	10	PAVING PLAN
C10	11	PAVING PLAN
C11	12	SITE DETAILS
C12	13	SITE DETAILS
C13	14	MAINTENANCE OF TRAFFIC NOTES & DETAILS
C14	15	MAINTENANCE OF TRAFFIC - DETOUR PLAN
C15	16	MAINTENANCE OF TRAFFIC - DETOUR PLAN

SITE NOTES

- THIS PROPERTY IS LOCATED WITHIN A CITY OF NORFOLK CBPA DESIGNATED INTENSELY DEVELOPED AREA (IDA).
- LAND DISTURBANCE = 0.34 ACRES. SITE WILL NEED VSMP CONSTRUCTION PERMIT PRIOR TO LAND DISTURBANCE. CONTACT THE VIRGINIA DEPARTMENT OF CONSERVATION AND RECREATION AT (804) 225-2613 TO OBTAIN A VSMP CONSTRUCTION PERMIT.
- THE CONTRACTOR SHALL CONTACT THE CITY OF NORFOLK, BUREAU OF ENVIRONMENTAL SERVICES AT 664-4368 AT LEAST 48 HOURS PRIOR TO ANY LAND DISTURBING ACTIVITY SO THAT A PRECONSTRUCTION CONFERENCE CAN BE SCHEDULED.
- CONTRACTOR SHALL INSTALL ALL UTILITIES TO THE TOLERANCE REQUIRED BY THE CITY OF NORFOLK AND AS SHOWN ON THESE PLANS. SPECIFICALLY:
 - ALL STORM DRAINAGE SHALL BE INSTALLED TO WITHIN 0.10 FEET (ONE TENTH OF A FOOT) OF THE ELEVATION SHOWN ON THE PLAN, OR AS SPECIFIED IN WRITING BY THE CITY.
 - MINIMUM STORM SEWER SLOPE SPECIFIED ON THE PLAN ARE ABSOLUTE MINIMUM; LESSER SLOPE WILL NOT BE ACCEPTED UNLESS IN WRITING BY THE CITY.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CORRECTION COST (I.E. PLAN, REVISION, PHYSICAL CORRECTION, ETC.) REQUIRED AS A RESULT OF INSTALLATION NOT MEETING THE REQUIREMENT TOLERANCE.

KEY PLAN

SCALE: 1"=200'



VICINITY MAP

SCALE: 1"=800'



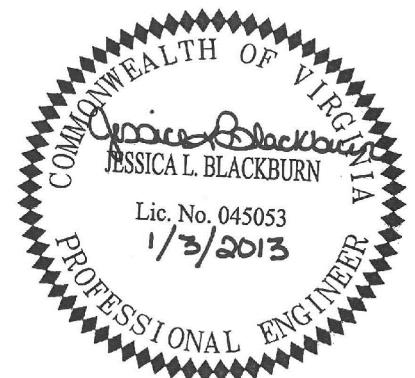
LOCATION MAP

SCALE: 1"=400'



CLARK•NEXSEN
Architecture & Engineering

6160 KEMPSVILLE CIRCLE
NORFOLK, VIRGINIA 23502
757-455-5800 FAX 757-455-5638
WWW.CLARKNEXSEN.COM



ROLAND PARK OVERPASS BRIDGE
RAMP IMPROVEMENTS
ADDITIVE ALTERNATE #1
DEPARTMENT OF PUBLIC WORKS
CITY OF NORFOLK, VIRGINIA

CN NO: 4183
DATE: 1/03/13
DESIGN: JLB
DRAWN: BJL
REVIEW: CAR

REVISIONS
No. Date Description By

TITLE SHEET

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SHEET 1 OF 16

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GENERAL NOTES

1.

EXCAVATED MATERIAL REMOVED FROM THE SITE SHALL BE DISPOSED OF IN A LAWFUL MANNER.
2.

UNLESS OTHERWISE NOTED, ALL EXISTING UTILITIES SHALL REMAIN IN PLACE. CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF UTILITIES DAMAGED BY CONSTRUCTION.
3.

WHEN MATERIALS WHICH ARE UNSUITABLE FOR SUBGRADE OCCUR WITHIN THE LIMITS OF CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE SUCH MATERIAL BELOW THE SUBGRADE, AND THE AREAS SO EXCAVATED SHALL BE BACKFILLED WITH APPROVED SUITABLE MATERIAL (SELECT BORROW).
4.

A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN AND PERMIT SHALL BE KEPT ON THE SITE AT ALL TIMES.
5.

FIELD ENGINEERING INFORMATION: ALL REQUESTS FOR INSPECTIONS AND FIELD CONSTRUCTION INFORMATION SHOULD BE DIRECTED TO TIM McCRANE FIELD ENGINEERING OFFICE, 664-4602.
6.

A CONSTRUCTION SCHEDULE SHALL BE SUBMITTED TO THE STRUCTURAL AND WATERFRONTS FACILITIES BUREAU PRIOR TO THE PRE-CONSTRUCTION CONFERENCE.
7.

SUBMITTALS ON MATERIALS FOR THIS PROJECT SHALL BE APPROVED BY DEPARTMENT OF PUBLIC WORKS DESIGN DIVISION PRIOR TO BEGINNING CONSTRUCTION.
8.

A SITE VISIT SHALL BE PERFORMED PRIOR TO SUBMITTING BID.
9.

ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM WITH THE CURRENT DESIGN STANDARDS FOR THE CITY OF NORFOLK DEPARTMENT OF PUBLIC WORKS, CITY OF NORFOLK DEPARTMENT OF UTILITIES SUPPLEMENTAL SPECIFICATIONS AND STANDARDS, HRPDC REGIONAL CONSTRUCTION STANDARDS AS AMENDED BY THE CITY OF NORFOLK, VDOT ROAD AND BRIDGE STANDARDS, VOL 1 & 2 AND VDOT ROAD AND BRIDGE SPECIFICATIONS.
10.

STATE LAW MANDATES NOTIFICATION OF UTILITY OWNERS 48 HOURS IN ADVANCE OF UTILITY WORK. FOR LOCATION OF UTILITIES, CALL: "MISS UTILITY" PRIOR TO ANY CONSTRUCTION OR EXCAVATION. THE CONTRACTOR SHALL ASSUME THE RESPONSIBILITY OF LOCATING ANY UNDERGROUND UTILITIES (PUBLIC OR PRIVATE) THAT MAY EXIST AND CROSS THROUGH THE AREA OF CONSTRUCTION. THE CITY OF NORFOLK SHALL BE HELD HARMLESS AGAINST ANY LOSSES, DAMAGES, OR CLAIMS OF ANY NATURE AT ALL ARISING OUT OF THE CONTRACTOR'S FAILURE TO COMPLY TO THE LAW. ANY UTILITIES (PUBLIC OR PRIVATE) DAMAGED WITH THE REQUIREMENTS OF THIS BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
11.

AN APPROVED PERMIT DOES NOT PRECLUDE THE EXCAVATOR, BY STATE LAW, FROM CONTACTING THE DIVISION OF TRANSPORTATION NOTIFICATION OFFICE AT 664-7306, 48 HOURS IN ADVANCE WITH PERMIT NUMBER.
12.

REPLACE ANY MATERIALS, PAVEMENT, ENTRANCES, INCLUDING UTILITY LOCATION MARKS, AT NO EXPENSE TO THE CITY OF NORFOLK THAT MUST BE CUT OR THAT ARE DAMAGED DURING CONSTRUCTION.
13.

CONSTRUCT AND MAINTAIN THROUGHOUT THE JOB ALL EROSION AND SEDIMENT CONTROL AS REQUIRED BY THE EROSION AND SEDIMENT CONTROL PLANS SHOWN ON THE CONTRACT DRAWINGS. ALL EROSION AND SEDIMENT CONTROL METHODS AND DETAILS SHALL COMPLY WITH THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (LATEST EDITION). SEE PLAN FOR LOCATIONS.
14.

TOPSOIL, SEED, FERTILIZE AND LIME ALL AREAS WITHIN THE PROJECT LIMITS NOT OCCUPIED BY STRUCTURES OR PAVEMENT.
15.

CITY WILL ACCEPT SAND OR STONE TICKETS ONLY ON THE DAY THE MATERIAL IS DELIVERED TO THE JOB SITE. TICKETS WILL NOT BE ACCEPTED WITH MONTHLY PAY ESTIMATE. THIS SHALL BE STRICTLY ENFORCED.
16.

LOCATION AND DEPTH OF CITY WATER IN EXCAVATION AREAS SHALL BE FIELD VERIFIED BY THE CONTRACTOR WITH A NORFOLK DEPARTMENT OF UTILITIES INSPECTOR PRESENT. CONTRACTOR SHALL CONTACT THE UTILITIES FIELD ENGINEERING OFFICE, TELEPHONE 823-1001, AT LEAST 72 HOURS PRIOR TO EXCAVATION TO ARRANGE FOR A NORFOLK DEPARTMENT OF UTILITIES INSPECTOR TO BE PRESENT. NO EXCAVATION OR OTHER SOIL DISTURBANCE IS ALLOWED WITHIN THE CITY RIGHT-OF-WAY OR UTILITY EASEMENT THAT IS WITHIN 24" OF THE TOP OF WATER MAINS. ANY SUCH EXCAVATION OR SOIL DISTURBANCE WILL REQUIRE A SITE SPECIFIC DESIGN TO PROTECT THE PIPE. STRUCTURAL PROTECTION DESIGNS REQUIRE DEPARTMENT OF UTILITIES REVIEW AND APPROVAL.
17.

WORK IN THE CITY RIGHT-OF-WAY IS PERMITTED ONLY BETWEEN THE HOURS OF 9:00 AM AND 3:00 PM OR AS DETERMINED BY THE RIGHT OF WAY ADMINISTRATOR.
18.

ALL WORK WITHIN THE RIGHT OF WAY SHALL COMPLY WITH THE CITY OF NORFOLK RIGHT OF WAY EXCAVATION & RESTORATION MANUAL, (ORDINANCE NO. 40.778), DEPT. OF PUBLIC WORKS, DIVISION OF RIGHT OF WAY. THE DOCUMENT MAY BE DOWNLOADED AT WWW.NORFOLK.GOV/PUBLICWORKS/.
19.

RIGHT OF WAY EXCAVATION PERMITS ARE REQUIRED TO PERFORM EXCAVATION WORK IN THE RIGHT OF WAY. PLEASE CONTACT THE RIGHT OF WAY PERMITS OFFICE AT 664-7306 OR AT WWW.NORFOLK.GOV/PUBLICWORKS/ROW
20.

CONTRACTOR SHALL CONFORM TO THE "OVERHEAD HIGH VOLTAGE ACT" (EFFECTIVE JULY 1, 1989) AND SHALL CONTACT THE NECESSARY AUTHORITIES PRIOR TO START OF CONSTRUCTION.
21.

CONTRACTOR TO NOTIFY THE PUBLIC WORKS INSPECTOR ON FIRST IDENTIFICATION OF CONFLICT WITH STORM WATER INFRASTRUCTURE.
22.

FOR WORK IN THE CITY OF NORFOLK RIGHT-OF-WAY, CONTACT 48 HOURS IN ADVANCE. UNLESS NOTED OTHERWISE.

2

DIVISION OF RIGHT OF WAY (PERMITS)	664-7306
DIVISION OF ENVIRONMENTAL STORM WATER	823-4000
DEPARTMENT OF PARKS AND URBAN FORESTRY	823-4023
CONSTRUCTION PERMITS	664-6565
DEPARTMENT OF UTILITIES (72 HOURS)	823-1001
STRUCTURAL & WATERFRONTS FACILITIES BUREAU	664-4647

23.

THE CONTRACTOR WILL BE REQUIRED TO POST A BOND TO WORK IN THE RIGHT OF WAY.
24.

AS PART OF THE CONTRACTOR'S PERMIT APPLICATION TO WORK IN THE RIGHT OF WAY, THE CONTRACTOR MUST SUBMIT A MAP IDENTIFYING THE PROJECTS STORAGE AND LAY DOWN AREA. THE CITY DOES NOT ALLOW STORAGE, STAGING OR LAY DOWN AREAS WITHIN THE RIGHT OF WAY. CONTRACTORS ARE ENCOURAGED TO MAKE ARRANGEMENTS TO STORE MATERIALS AND LAY DOWN ON PRIVATE PROPERTY OR THEY MUST BE STORED WITHIN CONSTRUCTION SITE.
25.

ALL TEMPORARY BULK WASTE CONTAINERS PLACED IN THE RIGHT OF WAY REQUIRE A PERMIT FROM THE DIVISION OF RIGHT OF WAY AT 664-7306.
26.

NO LANE CLOSURES AND/OR WORK IN THE RIGHT-OF-WAY, INCLUDING GRADING, SIDEWALK, CURB AND GUTTER, AND DRIVEWAY APRON INSTALLATION WILL BE ALLOWED WITHOUT A PERMIT FROM THE DIVISION OF RIGHT-OF-WAY (664-7306). ALL TRAFFIC CONTROL SHALL COMPLY WITH THE CURRENT EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE VIRGINIA WORK AREA PROTECTION MANUAL, AND THE CITY OF NORFOLK RIGHT-OF-WAY EXCAVATION AND RESTORATION MANUAL. ADDITIONAL CHARGES APPLY IF OFF-DUTY OFFICERS ARE REQUIRED. A LIST OF PERMIT FEES IS LOCATED AT WWW.NORFOLK.GOV/PUBLICWORKS/ROW.
27.

WHEN THE CONTRACTOR'S WORK REQUIRES THE SAW CUTTING AND/OR PARTIAL DEMOLITION AND/OR REMOVAL OF ANY SECTION OF AN EXISTING SIDEWALK, THE CONTRACTOR SHALL BE REQUIRED TO REMOVE SAID SIDEWALK AND REPLACE IT WITH A NEW MONOLITHIC SIDEWALK. SIDEWALK SHALL BE REMOVED TO THE NEAREST JOINT. ALL CONCRETE IS TO BE SAW CUT. NO PATCHING WILL BE ALLOWED. SIDEWALKS SHALL BE REPLACED WITH AN APPROVED SIDEWALK DETAIL. CONTACT THE DIVISION OF RIGHT-OF-WAY PERMIT OFFICE AT 664-7306 FOR APPROVAL (ORDINANCE NO. 40.778).
28.

WHEN A NEW SIDEWALK IS INSTALLED, ALL NEW OR EXISTING UTILITY STRUCTURES SHALL BE INSTALLED AND/OR RELOCATED OUTSIDE THE AREA OF THE NEW SIDEWALK. A PERMIT AND INSPECTION ARE REQUIRED.
29.

THE CONTRACTOR WILL BE REQUIRED TO SUBMIT A DETAILED TRAFFIC CONTROL PLAN (MOT) WITH THE CONTRACTOR'S PERMIT APPLICATION TO WORK IN THE RIGHT-OF-WAY. THE MOT SHALL BE A DRAWING OR AERIAL PHOTO WITH SITE-SPECIFIC DETAILS. THESE SHALL INCLUDE, BUT ARE NOT LIMITED TO, TRAFFIC SIGNS, DIRECTIONAL SIGNS, DESTINATION SIGNAGE, CHANNELIZING DEVICES, WATER-FILLED BARRIERS, PORTABLE MESSAGE BOARDS WITH MESSAGES TO BE DISPLAYED AND TIMES AND DURATIONS OF DISPLAYED MESSAGES. ADDITIONALLY, THE MOT SHALL DISPLAY THE EXACT LOCATION OF ALL SIGNS AND/OR DEVICES, INCLUDING SPACING FOR EACH SIGN AND/OR DEVICE. SPACING SHALL BE APPROPRIATE FOR THE WORK ZONE LOCATION AND POSTED SPEED LIMITS. ALL MAINTENANCE OF TRAFFIC (MOT) PLANS SHALL CONFORM TO THE CURRENT ISSUE OF THE VIRGINIA WORK AREA PROTECTION MANUAL. COPIES OR REPRODUCTIONS OF THE MOT THAT ARE INCLUDED WITH THE PROJECT DRAWINGS AND SPECIFICATIONS WILL NOT BE ACCEPTED WITH THE CONTRACTOR'S PERMIT APPLICATION. CONTRACTORS SHOULD CONSIDER THESE ITEMS WHEN BIDDING THE PROJECT FOR CONSTRUCTION.
30.

TO ACQUIRE TREE PERMIT, THE CONTRACTOR SHALL INSTALL TREE PROTECTION FENCING AND THEN CONTACT CITY FORESTER, RICHARD WERNICKE (757) 823-4024 TO DO AN ON-SITE TREE INSPECTION OF TREES SCHEDULED FOR DEMOLITION, PRUNING OR ANY DISTURBANCE NEAR THE TREES WITHIN THE RIGHT-OF-WAY/CITY OF NORFOLK PROPERTY PRIOR TO ANY GROUND DISTURBANCE.
31.

A CITY ISSUED TREE PERMIT WILL REQUIRE A CERTIFIED ARBORIST TO TRIM OR REMOVE TREES ON CITY OF NORFOLK PROPERTY/RIGHT-OF-WAY.
32.

FLOWABLE FILL IS NOT AN APPROVED MATERIAL FOR USE IN THE CITY OF NORFOLK FOR BACKFILL WITHOUT PRIOR APPROVAL. THE SELECT MATERIAL AND 21A STONE WILL BE IN ACCORDANCE WITH THE 2002 VDOT ROAD AND BRIDGE SPECIFICATIONS. FOR BACKFILL AROUND THE PIPE USE SELECT MATERIAL (SECTION 207). TYPE I AND CBR 20 COMPACTION. FOR THE SUB BASE MATERIAL USE 6 INCH VDOT 21A STONE IN ACCORDANCE TO SECTION 208.
33.

FULL CURB TO CURB RESURFACING MAY BE REQUIRED IF ROADWAY PORTION IS CUT WITHIN THE FIRST FIVE YEARS AFTER RESURFACING. AN ADMINISTRATIVE FEE OF \$500 WILL BE ASSESSED IN ACCORDANCE WITH CITY CODE.
34.






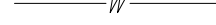












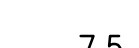

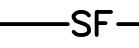



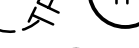














ANY EXCAVATION IN THE ROADWAY WITH A TEMPORARY STONE (21A) RESTORATION WILL BE REQUIRED TO HAVE BASE COURSE ASPHALT IN PLACE WITHIN 30 DAYS.
35.

ALL MISS UTILITY MARKINGS IN THE RIGHT-OF-WAY ARE REQUIRED TO BE ERADICATED AT THE COMPLETION OF THE PROJECT IN ACCORDANCE WITH THE CITY'S ROW EXCAVATION AND RESTORATION MANUAL LOCATED AT WWW.NORFOLK.GOV/PUBLICWORKS/ROW.ASP.
36.

THE CONTRACTOR IS RESPONSIBLE FOR CLEANING OUT THE EXISTING STORM SYSTEM WITHIN THE PROJECT LIMITS IN ORDER TO OBTAIN INVERT ELEVATIONS FOR THE NEW STRUCTURES. PAYMENT FOR THIS SHALL BE INCIDENTAL TO THE CONTRACT.

3

LEGEND

EXISTING	NEW	
		DEMOLITION
		GUY WIRE
		SHRUB
		TREE
		UNDERGROUND WATER
		TOP OF SLOPE
		TOE OF SLOPE
		SIGN
		POWER POLE
		ELECTRIC HAND HOLE
		STORM DRAIN MANHOLE
		SANITARY SEWER MANHOLE
		SOIL BORINGS
		COMMUNICATION HAND HOLE
	7.5	SPOT ELEVATION
		SILT FENCE
		TREE PROTECTION
		CONNECT TO EXISTING
		GUARDRAIL
		CONCRETE
		CURB
		OVERHEAD ELECTRICAL
		STORM DRAINAGE INLET
		STORM DRAINAGE PIPE
		SANITARY LINES
		INLET PROTECTION
		SAWCUT
		SOIL STABILIZATION

4

ABBREVIATIONS

BP	BEGIN PROJECT
CDI	CURB DROP INLET
DVP	DOMINION VIRGINIA POWER
ELEV	ELEVATION
EP	END OF PROJECT
HRPDC	HAMPTON ROADS PLANNING DISTRICT COMMISSION
IRF	IRON ROD FOUND
MG	MATCH GRADE
MOD	MODIFIED
N/F	NOW OR FORMERLY
OHW	OVERHEAD WIRE
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PT	POINT OF TANGENCY
PP	POWER POLE
RCP	REINFORCED CONCRETE PIPE
SQ	SQUARE
SSMH	SANITARY SEWER MANHOLE
STA	STATION
STD	STANDARD
TBM	TEMPORARY BENCHMARK
TYP	TYPICAL
VDOT	VIRGINIA DEPARTMENT OF TRANSPORTATION
VESCH	VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK
VSMP	VIRGINIA STORMWATER MANAGEMENT PROGRAM
W	WEST OR WATER
W/	WITH
YDI	YARD DROP INLET
#	NUMBER

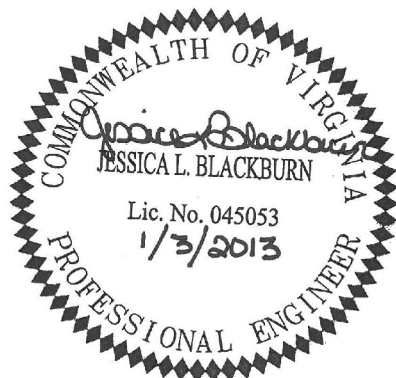
UTILITY OWNERS

WATER & SEWER	Owner: Norfolk Utilities Contact: David Speer Address: 400 Granby Street Norfolk, Virginia 23510 Phone: (757) 664-6701 Fax: (757) 664-6739
HRSD SEWER	Owner: Hampton Roads Sanitation District Contact: Bambos Charalambous Address: 1436 Air Rail Avenue Virginia Beach, Virginia 23455 Phone: (757) 460-7015 Fax: (757) 460-0637
ELECTRIC	Owner: Dominion Virginia Power Contact: Bill Mifflin Address: 2100 Cromwell Drive Norfolk, Virginia 23509 Phone: (757) 857-2372
TELEPHONE	Owner: Verizon Contact: Wayne Hixenbaugh Address: 3131B Sewells Point Road Norfolk, Virginia 23513 Phone: (757) 667-4099
CABLE T.V.	Owner: Cox Communications Contact: Anthony Crish Address: 5200 Cleveland Street Virginia Beach, Virginia 23462 Phone: (757) 222-6575
TELECOMMUNICATION	Owner: Level 3 Communications (formerly KMC Telecom) Contact: Richard Eldreth Address: 5700 Lake Wright Drive Norfolk, Virginia 23502 Phone: (757) 777-7719
GAS	Owner: Virginia Natural Gas Contact: Kevin Starke Address: 544 S Independence Blvd Virginia Beach, Virginia 23452 Phone: (757) 616-7529 Fax: (757) 466-5514
TRAFFIC/TRANSPORTATION	Owner: City of Norfolk Contact: Rob Brown Address: 810 Union Street, Room 200 Norfolk, Virginia 23520 Phone: (757) 664-7300 Fax: (757) 664-7311

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ROLAND PARK OVERPASS BRIDGE

RAMP IMPROVEMENTS

ADDITIVE ALTERNATE #1

DEPARTMENT OF PUBLIC WORKS

CITY OF NORFOLK, VIRGINIA

CN NO: 4183
DATE: 1/03/13
DESIGN: JLB
DRAWN: BJL
REVIEW: CAR

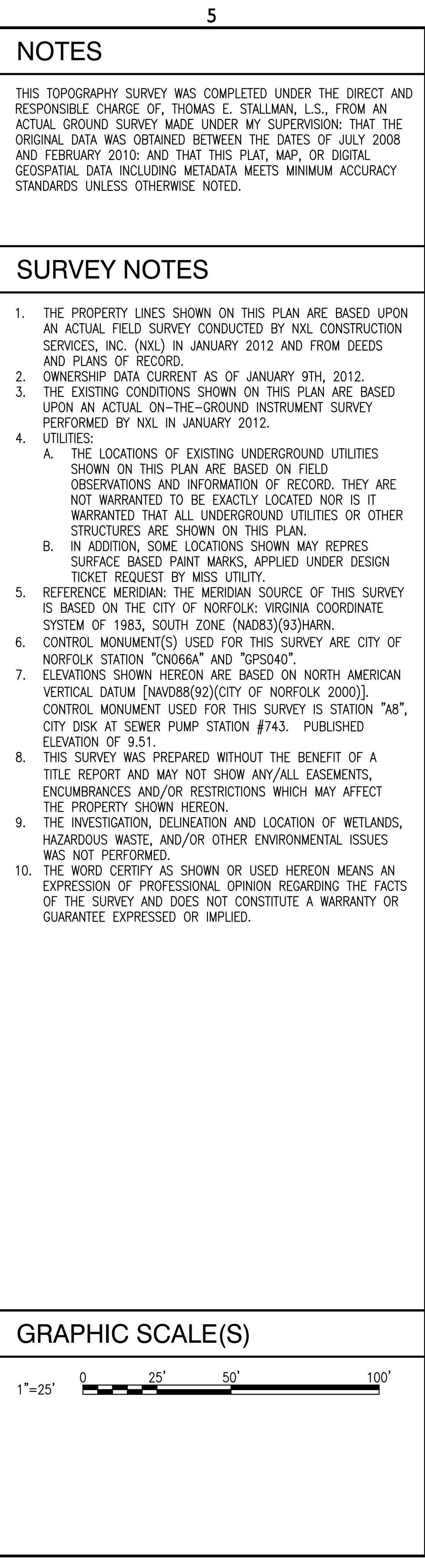
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No.	Date	Description	By
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LEGEND
GENERAL NOTES

&
ABBREVIATIONS

C1



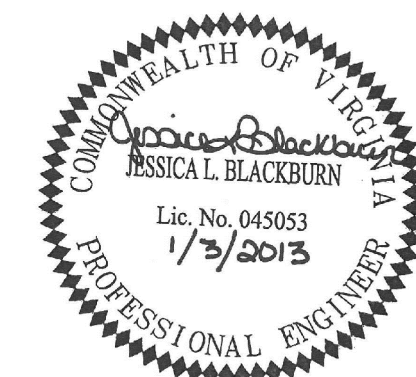
SURVEY NOTES

1. THE PROPERTY LINES SHOWN ON THIS PLAN ARE BASED UPON AN ACTUAL FIELD SURVEY CONDUCTED BY NLX CONSTRUCTION SERVICES, INC. (NLX) IN JANUARY 2012 AND FROM DEEDS AND PLANS OF RECORD.
2. OWNERSHIP DATA CURRENT AS OF JANUARY 9TH, 2012.
3. THE EXISTING CONDITIONS SHOWN ON THIS PLAN ARE BASED UPON AN ACTUAL ON-THE-GROUND INSTRUMENT SURVEY PERFORMED BY NLX IN JANUARY 2012.
4. UTILITIES:
 - A. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED ON FIELD OBSERVATIONS AND INFORMATION OF RECORD. THEY ARE NOT WARRANTED TO BE EXACTLY LOCATED NOR IS IT WARRANTED THAT ALL UNDERGROUND UTILITIES OR OTHER STRUCTURES ARE SHOWN ON THIS PLAN.
 - B. IN ADDITION, SOME LOCATIONS SHOWN MAY REPRESENT SURFACE BASED PAINT MARKS, APPLIED UNDER DESIGN TICKET REQUEST BY MISS UTILITY.
5. REFERENCE MERIDIAN: THE MERIDIAN SOURCE OF THIS SURVEY IS BASED ON THE CITY OF NORFOLK: VIRGINIA COORDINATE SYSTEM OF 1983, SOUTH ZONE (NAD83)(93)HARN.
6. CONTROL MONUMENT(S) USED FOR THIS SURVEY ARE CITY OF NORFOLK STATION "CN066A" AND "GPS040".
7. ELEVATIONS SHOWN HEREON ARE BASED ON NORTH AMERICAN VERTICAL DATUM [NAV88(92)(CITY OF NORFOLK 2000)]. CONTROL MONUMENT USED FOR THIS SURVEY IS STATION "A8", CITY DISK AT SEWER PUMP STATION #743. PUBLISHED ELEVATION OF 9.51.
8. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND MAY NOT SHOW ANY/ALL EASEMENTS, ENCUMBRANCES AND/OR RESTRICTIONS WHICH MAY AFFECT THE PROPERTY SHOWN HEREON.
9. THE INVESTIGATION, DELINEATION AND LOCATION OF WETLANDS, HAZARDOUS WASTE, AND/OR OTHER ENVIRONMENTAL ISSUES WAS NOT PERFORMED.
10. THE WORD CERTIFY AS SHOWN OR USED HEREON MEANS AN EXPRESSION OF PROFESSIONAL OPINION REGARDING THE FACTS OF THE SURVEY AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE EXPRESSED OR IMPLIED.

GRAPHIC SCALE(S)



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ROLAND PARK OVERPASS BRIDGE RAMP IMPROVEMENTS ADDITIONAL ALTERNATE #1

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CITY OF NORFOLK, VIRGINIA

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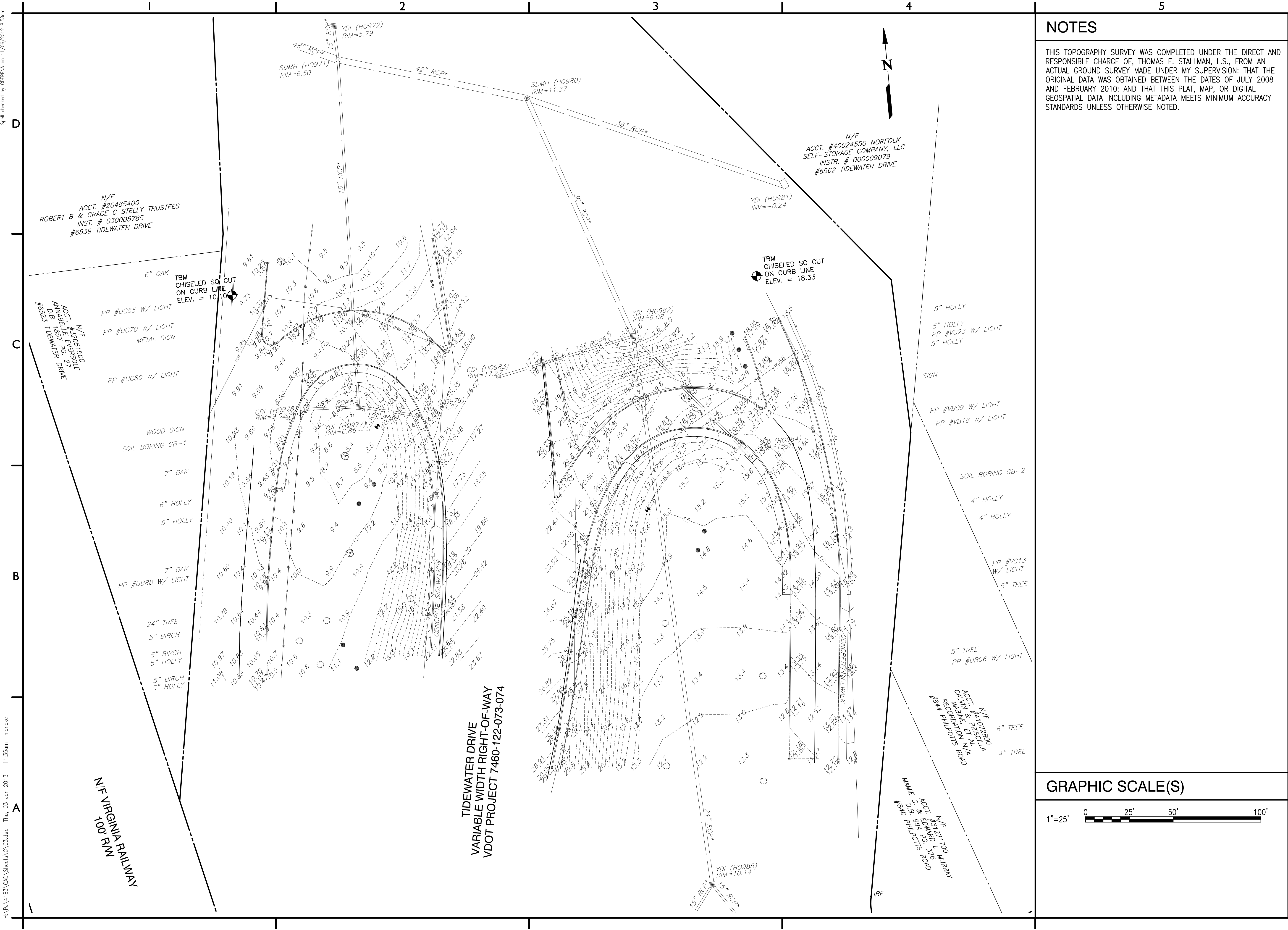
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EXISTING CONDITIONS PLAN

C2

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NOTES

THIS TOPOGRAPHY SURVEY WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF, THOMAS E. STALLMAN, L.S., FROM AN ACTUAL GROUND SURVEY MADE UNDER MY SUPERVISION; THAT THE ORIGINAL DATA WAS OBTAINED BETWEEN THE DATES OF JULY 2008 AND FEBRUARY 2010; AND THAT THIS PLAT, MAP, OR DIGITAL GEOSPATIAL DATA INCLUDING METADATA MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.

GRAPHIC SCALE(S)



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**ROLAND PARK OVERPASS BRIDGE
RAMP IMPROVEMENTS
ADDITIVE ALTERNATE #1**

DEPARTMENT OF PUBLIC WORKS
CITY OF NORFOLK, VIRGINIA

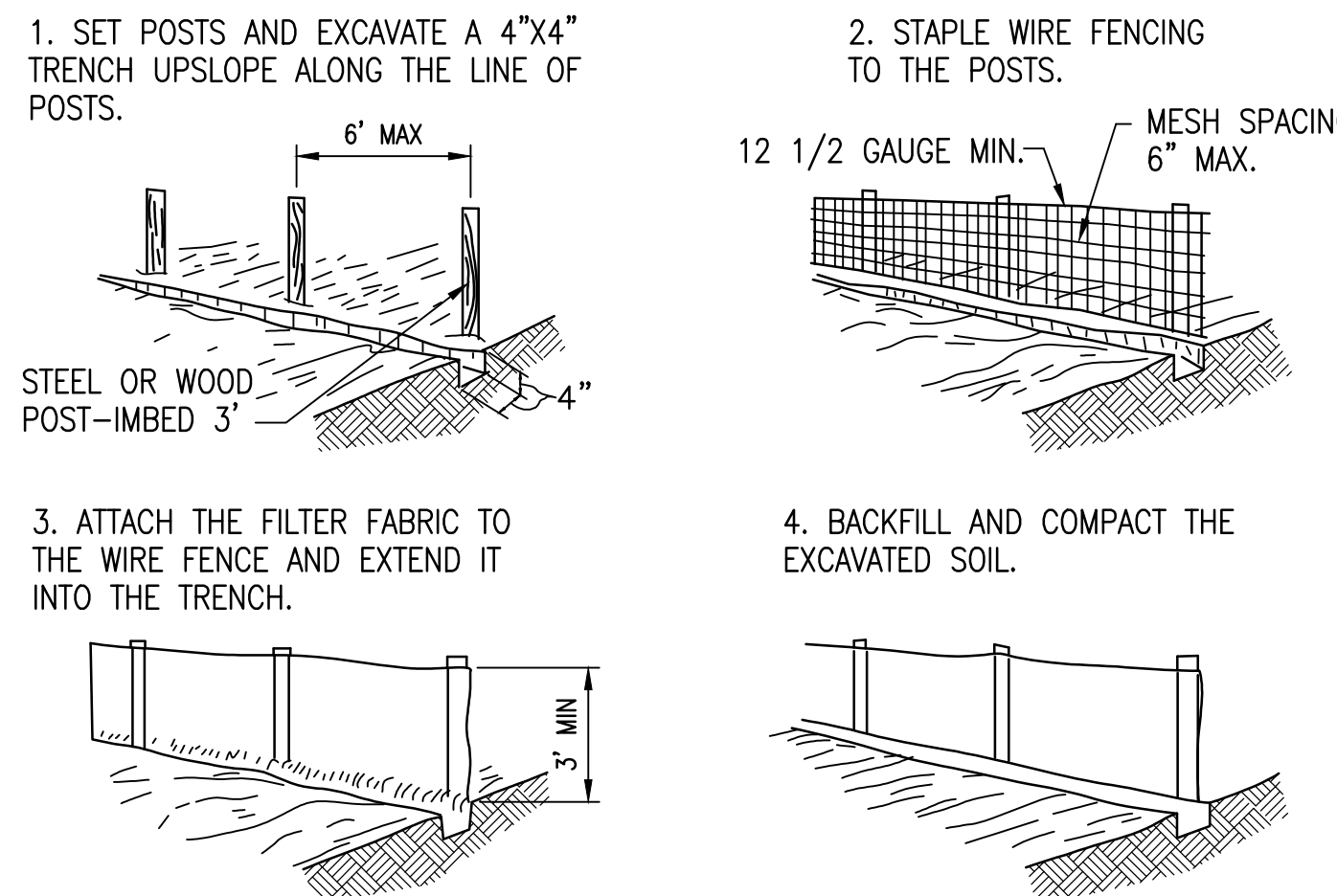
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DATE: 1/03/13
DESIGN: JLB
DRAWN: BJL
REVIEW: CAR

REVISIONS		
No.	Date	Description

EXISTING
CONDITIONS
PLAN

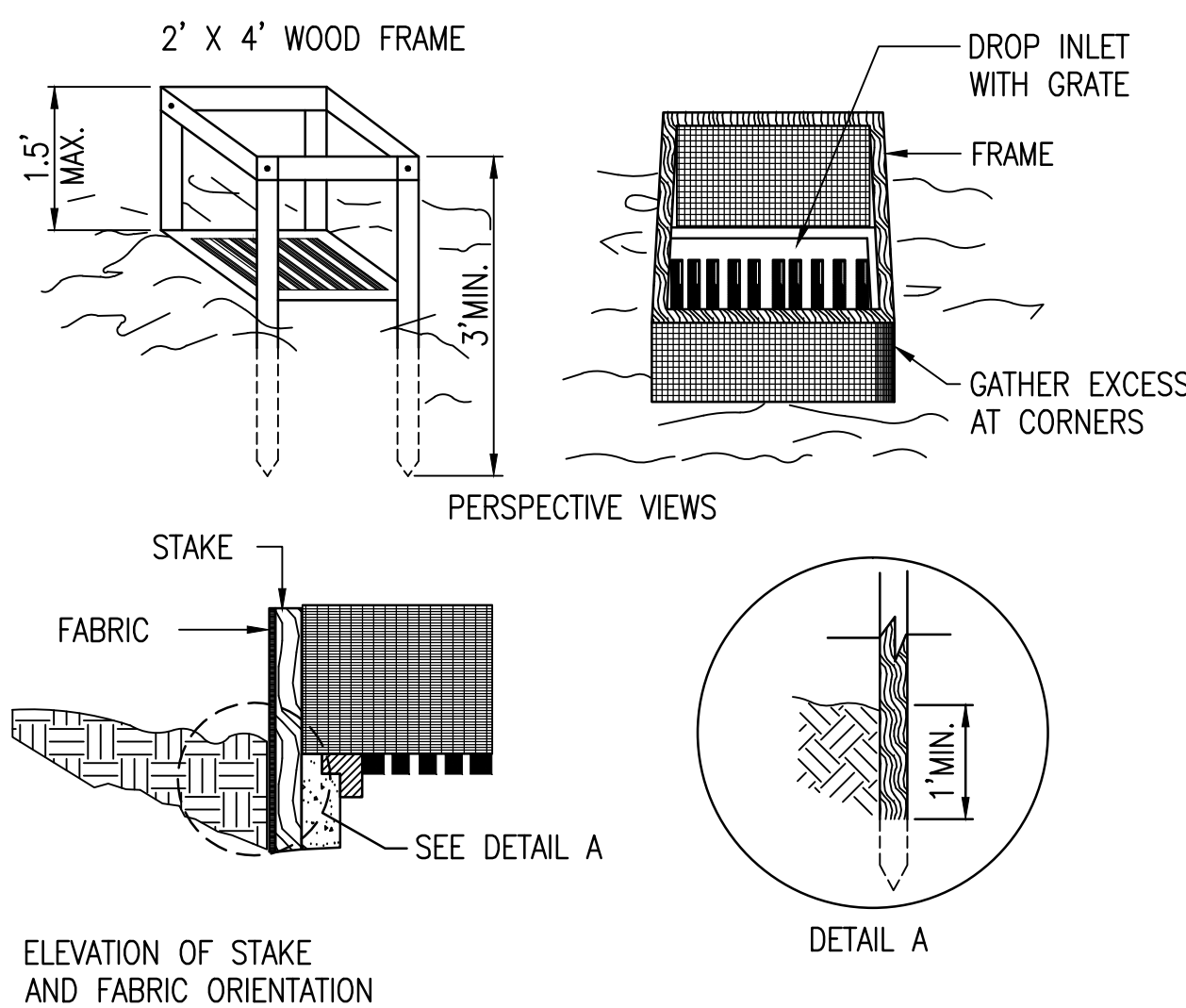
C3

SHEET 4 OF 16



TEMPORARY SILT FENCE

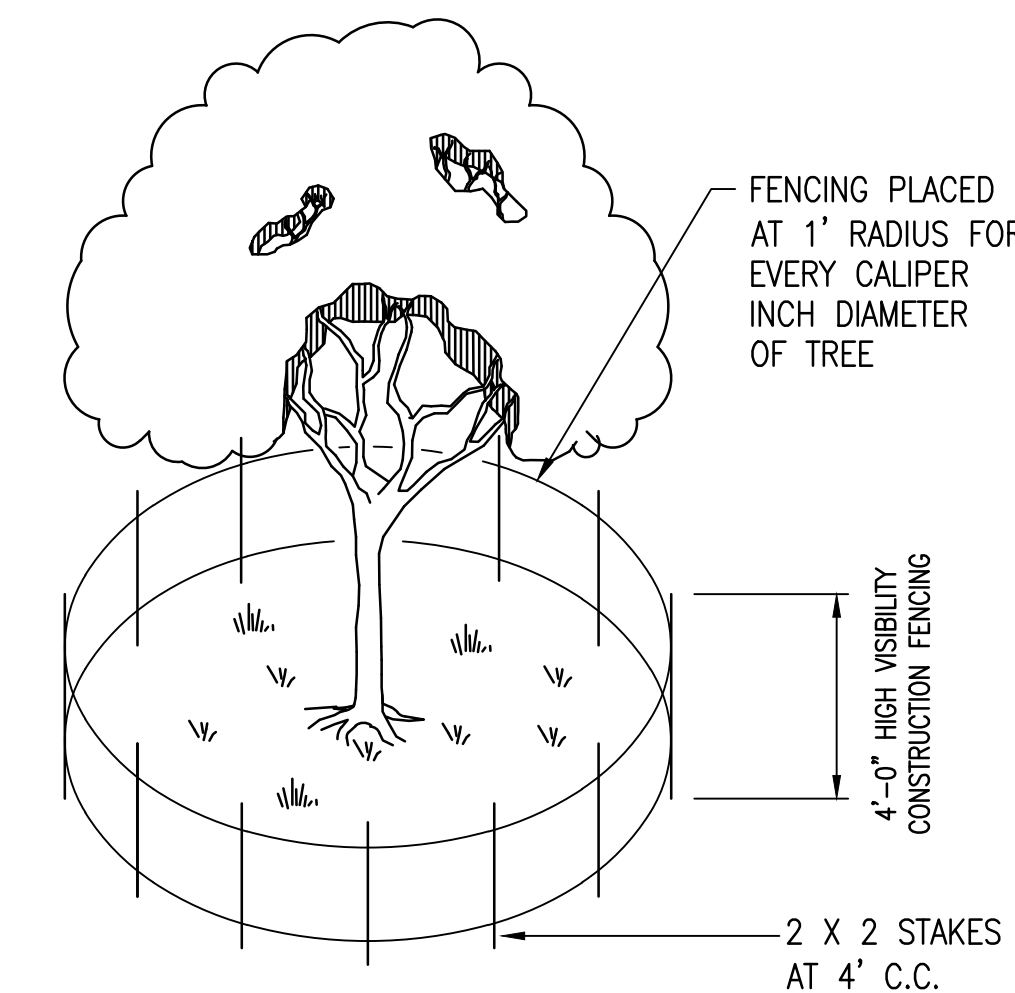
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SPECIFIC APPLICATION
THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPE NO GREATER THAN 5% WHERE THE INLET SHEET OR OVERLAND FLOWS (NOT EXCEEDING 1 CFS) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.

DROP INLET PROTECTION

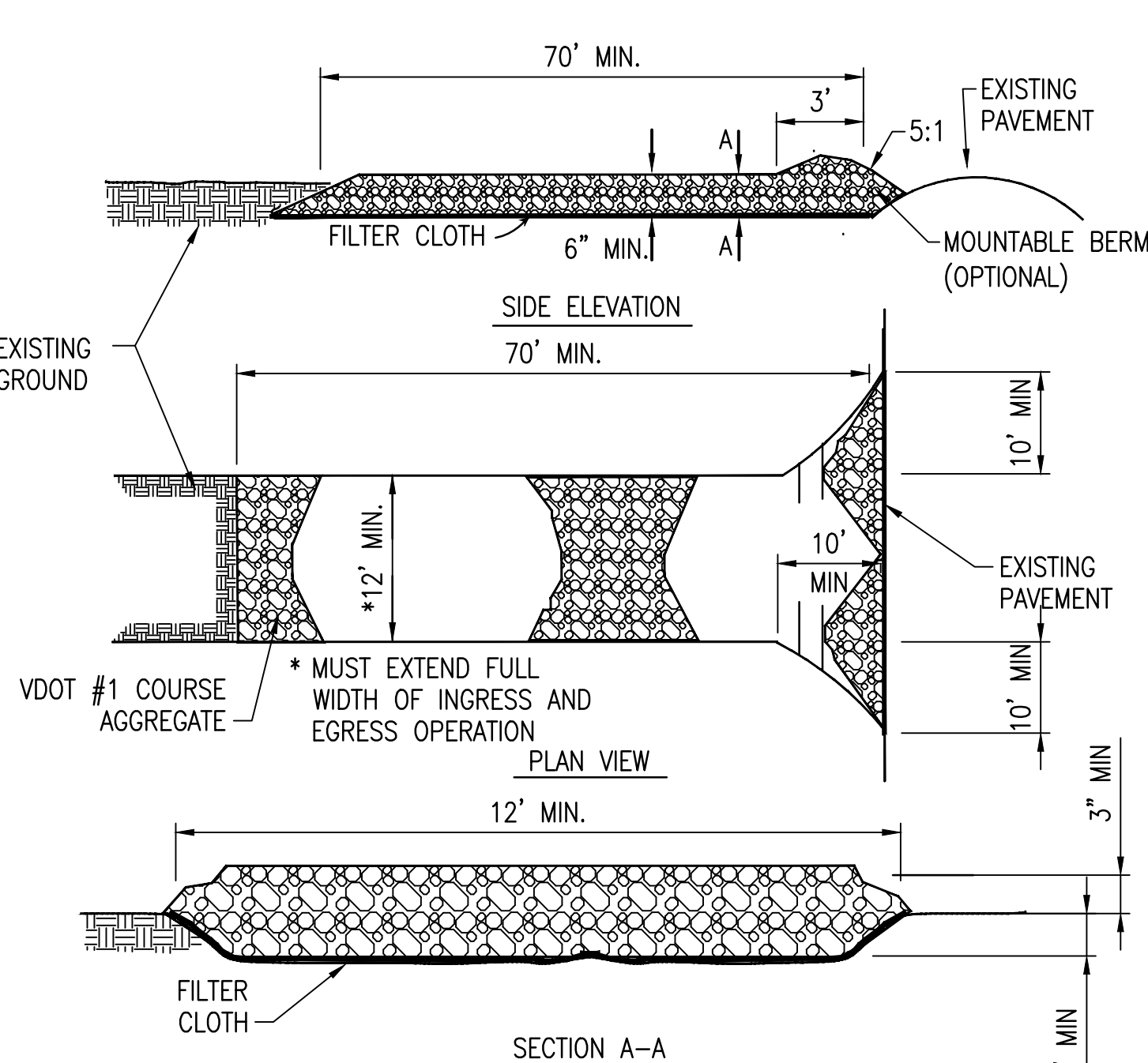
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NOTE:
DRIVE STAKES FIRMLY INTO GROUND AT LEAST 12"

TREE PROTECTION

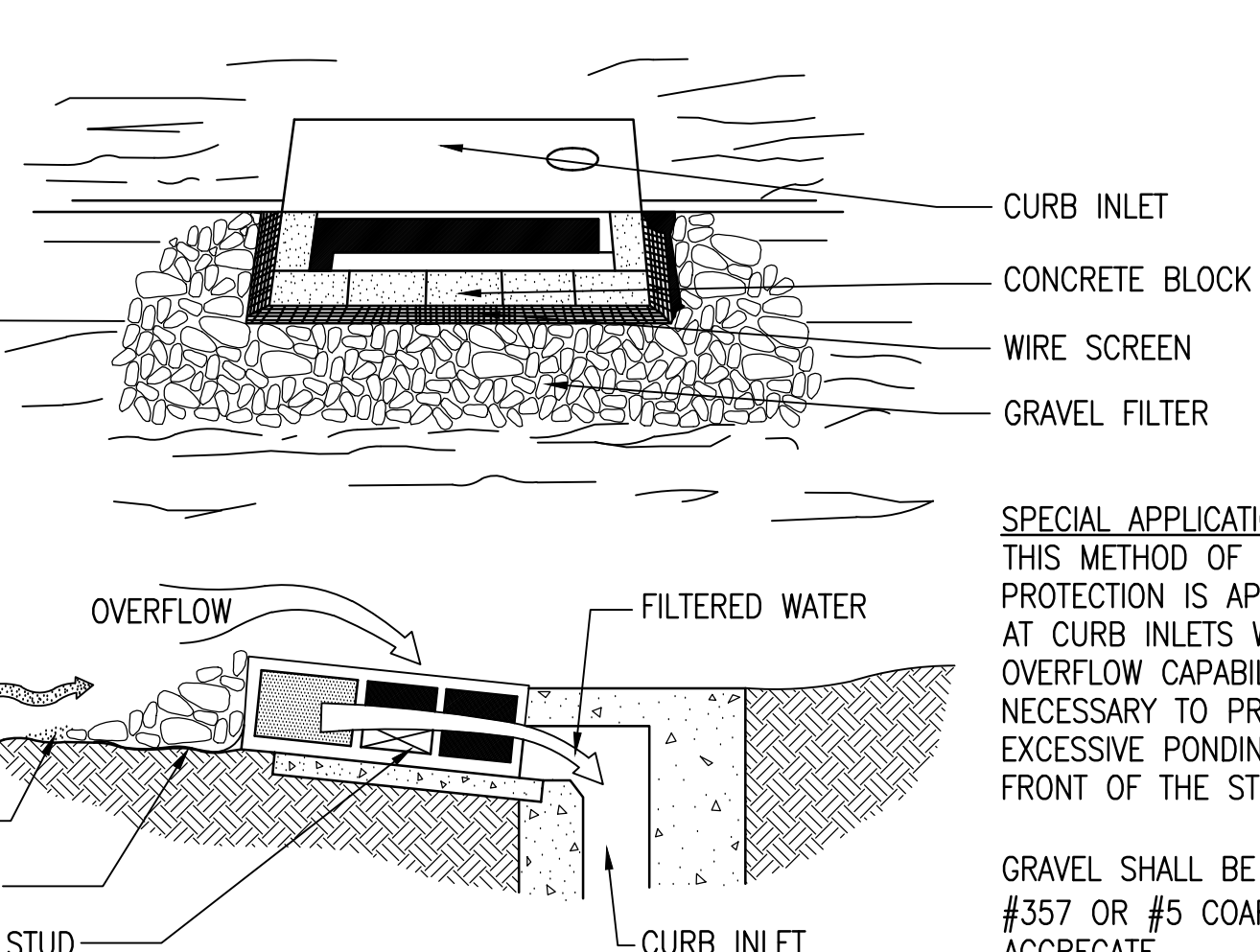
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SOURCE: VA. DSWC

TEMPORARY CONSTRUCTION ENTRANCE

NO SCALE



BLOCK AND GRAVEL CURB INLET SEDIMENT FILTER

NO SCALE

SOIL EROSION AND SEDIMENT CONTROL NOTES

EROSION AND SEDIMENT CONTROL NARRATIVE

PROJECT DESCRIPTION
THE EROSION AND SEDIMENT CONTROL PLAN AND SEQUENCE WILL ADDRESS LAND DISTURBANCE FOR THE DESIGN OF THE ROLAND PARK RAMP IMPROVEMENT PROJECT LOCATED ALONG TIDEWATER DRIVE IN NORFOLK.

THE PROJECT INVOLVES WIDENING THE ENTRANCE AND EXIT RAMP TO ACCOMMODATE THE HEAVY TRACTOR TRAILER TRAFFIC. THESE IMPROVEMENTS RESULT IN 0.34 ACRES OF DISTURBANCE. THE PROJECT WILL SLIGHTLY INCREASE THE IMPERVIOUS COVER BY 0.04 ACRES DUE TO THE WIDENING OF THE RAMP.

EXISTING SITE CONDITIONS
THE SITE IS ALONG AN URBAN MINOR ARTERIAL THAT CROSSES OVER RAILROAD TRACKS. DUE TO THE CLOVERLEAF PATTERN OF THE RAMP, THE GRADES RANGE APPROXIMATELY 7 FEET.

ADJACENT PROPERTY
THE SITE IS SURROUNDED BY RESIDENTIAL NEIGHBORHOODS AND SHIPPING WAREHOUSES.

OFF-SITE AREAS
STAGING AND STOCKPILE AREAS WILL BE LOCATED WITHIN THE PROJECT LIMITS SHOWN ON THE PLANS. CONTRACTOR STAGING AREA WILL BE WITHIN THE RAMP. SOIL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED AT THE STAGING AREA.

SOILS
TO A DEPTH OF TWENTY FEET BELOW GROUND, THE SOILS CONSIST OF SILTY SAND.

CRITICAL EROSION AREAS
THERE ARE NO CRITICAL EROSION AREAS ASSOCIATED WITH THIS PROJECT.

EROSION AND SEDIMENT CONTROL MEASURES
UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESH), CURRENT EDITION AND THE CITY OF NORFOLK SEDIMENT CONTROL HANDBOOK EROSION AND SEDIMENT CONTROL ORDINANCE. THE MINIMUM STANDARDS OF THE VESH SHALL BE ADHERED TO UNLESS OTHERWISE WAIVED OR APPROVED BY A VARIANCE FROM THE CITY PRIOR TO DEMOLITION AND SITE CLEARING.

MEASURES INCLUDE TEMPORARY CONSTRUCTION ENTRANCES, INLET PROTECTION, TREE PROTECTION AND SILT FENCE.

EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO DEMOLITION AND EARTH-MOVING ACTIVITIES.

CONTACT THE CITY OF NORFOLK, BUREAU OF ENVIRONMENTAL SERVICES (664-4368) AT LEAST 48 HOURS PRIOR TO ANY LAND DISTURBING ACTIVITIES (INCLUDING DEMOLITION) TO SCHEDULE A PRE-CONSTRUCTION CONFERENCE.

MANAGEMENT STRATEGIES/SEQUENCE OF CONSTRUCTION

1. INSTALL CONSTRUCTION ENTRANCE, TREE PROTECTION, SILT FENCE AND INLET PROTECTION ON THE PROJECT SITE AND THE STAGING AREA BEFORE ANY SITE DEMOLITION OR EARTH-MOVING ACTIVITY. SITE ACCESS BY CONSTRUCTION VEHICLES TO GRADED AREAS SHALL BE LIMITED TO THE CONSTRUCTION ENTRANCE.
2. STOCK PILE SOIL AND OTHER CREDIBLE MATERIALS AND STABILIZE OR PROTECT WITH SEDIMENT TRAPPING MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR TEMPORARY AND PERMANENT STABILIZATION MEASURES FOR STOCKPILES LOCATED WITHIN THE PROJECT SITE OR THOSE TRANSPORTED FROM THE PROJECT SITE.
3. FILTER EFFLUENT FROM DEWATERING OPERATIONS TO AN APPROVED SEDIMENT TRAPPING DEVICE AND DISCHARGE IN A MANNER THAT DOES NOT ADVERSELY AFFECT ADJACENT PROPERTIES, WETLANDS, WATERWAYS OR THE STORM DRAIN SYSTEM.
4. MONITOR AND ALLAY DUST USING WATER, MULCH OR CHEMICAL DUST ADHESIVES, TEMPORARY SEEDING AND CONTROL OF CONSTRUCTION SITE TRAFFIC OR OTHER MEASURES AS DIRECTED BY THE CITY INSPECTOR.
5. COMPLETE MAJOR GRADING AS SOON AS POSSIBLE AFTER BEGINNING CONSTRUCTION. TEMPORARY SEEDING OR OTHER APPROVED SOIL STABILIZATION MEASURES SHALL BE APPLIED TO ALL DENUDED OR DISTURBED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DISTURBED LONGER THAN 30 DAYS. INSTALL PERMANENT STABILIZATION WITHIN 7 DAYS OR AS DIRECTED BY THE CITY INSPECTOR AFTER FINAL GRADING IS COMPLETED. TEMPORARY SEEDING AND PERMANENT SEEDING WILL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH SPECIFICATIONS.
6. INSTALL AND MAINTAIN ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED NECESSARY BY THE CITY INSPECTOR.
7. REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES AND DISPOSE OF SEDIMENTS WITHIN 30 DAYS ONCE THE CITY INSPECTOR DETERMINES THAT CONSTRUCTION IS SUBSTANTIALLY COMPLETE AND THE WORK AREA IS STABILIZED.

MAINTENANCE
THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES.

INSPECT ALL EROSION AND SEDIMENT CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF PRODUCING EVENT. ANY NECESSARY REPAIRS TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL MEASURES AND CLEANUP OF SEDIMENTATION ARE THE RESPONSIBILITY OF THE CONTRACTOR AND WILL BE PERFORMED IMMEDIATELY.

SEDIMENTS AND EXCESS SPOILS WILL BE DISPOSED AT A FACILITY APPROVED BY LOCAL AND STATE REGULATIONS.

STOCKPILES STABILIZED WITH TEMPORARY SEEDING AND GRADED AREAS PERMANENTLY STABILIZED WITH SEED SHALL BE CHECKED REGULARLY TO ENSURE THAT A GOOD STAND IS MAINTAINED. AREAS SHALL BE FERTILIZED AND WATERED IN ACCORDANCE WITH THE SPECIFICATIONS.

THE STRUCTURAL AND VEGETATIVE PRACTICES TO BE USED ARE DISCUSSED BELOW AND REFERENCED TO THE RESPECTIVE EROSION & SEDIMENT CONTROL NUMBER.

STRUCTURAL PRACTICES

1. **TEMPORARY CONSTRUCTION ENTRANCE - 3.02**
SITE ACCESS TO GRADED AREAS SHALL BE LIMITED TO TEMPORARY CONSTRUCTION ENTRANCE(S) OR AN APPROVED COMPARABLE CONTROL MEASURE TO MINIMIZE THE AMOUNT OF MUD TRANSPORTED ONTO PUBLIC ROADS AND SURFACES BY CONSTRUCTION VEHICLES. SEDIMENT WILL BE REMOVED ON A DAILY BASIS.
2. **SILT FENCE BARRIER - 3.05**
SILT FENCE SEDIMENT BARRIERS SHALL BE PLACED AROUND THE SITE PERIMETER OF GRASS AREAS TO BE DISTURBED TO FILTER SEDIMENT LADEN OVERLAND RUNOFF. ORANGE SAFETY FENCE WILL ALSO BE PROVIDED TO DELINEATE THE CONSTRUCTION LIMITS.
3. **STORM DRAIN INLET PROTECTION - 3.07**
ALL STORM DRAIN INLETS SHALL BE PROTECTED DURING CONSTRUCTION TO FILTER SEDIMENT-LADEN CONSTRUCTION RUNOFF BEFORE ENTERING STORM DRAIN INLETS.
4. **DEWATERING - 3.26**
DEWATERING SHALL BE FILTERED THROUGH APPROVED SEDIMENT TRAPPING DEVICES, SUCH AS SEDIMENT BAGS, PRIOR TO DISCHARGING ONTO AN EROSION RESISTANT SURFACE.
5. **SOIL STABILIZATION - 3.36**
MATTING SHALL BE INSTALLED ON CRITICAL EROSION AREAS TO AID IN ESTABLISHMENT OF VEGETATION.
6. **TREE PROTECTION - 3.38**
A FENCE BARRIER IS TO BE PLACED AROUND THE TREES THAT WILL NOT BE DISTURBED TO PROTECT THE TREES AND OTHER VEGETATION FROM CONSTRUCTION EQUIPMENT AND SOIL COMPACTION.
7. **DUST CONTROL - 3.39**
MEASURES TO PREVENT AND CONTROL DUST DURING DEMOLITION, EXCAVATION, GRADING AND ALL OTHER POTENTIAL LAND DISTURBING ACTIVITIES SHALL BE USED DURING CONSTRUCTION.

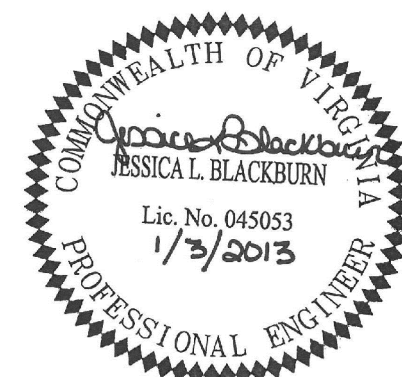
CITY OF NORFOLK STANDARD EROSION & SEDIMENT CONTROL NOTES

1. UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (3RD EDITION, 1992) AND THE CITY OF NORFOLK EROSION AND SEDIMENT CONTROL ORDINANCE.
2. THE CONTRACTOR SHALL CONTACT THE CITY OF NORFOLK, BUREAU OF ENVIRONMENTAL SERVICES (664-4368) AND DIVISION OF ENVIRONMENTAL STORM WATER MANAGEMENT (823-4000) 48 HOURS PRIOR TO ANY LAND DISTURBING ACTIVITY (INCLUDING DEMOLITION) TO SCHEDULE A PRECONSTRUCTION CONFERENCE.
3. THE CONTRACTOR SHALL APPLY PERMANENT OR TEMPORARY SOIL STABILIZATION TO ALL DENUDED OR DISTURBED AREAS WITHIN 7 DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. SOIL STABILIZATION MUST ALSO BE APPLIED TO DENUDED OR DISTURBED AREAS WHICH MAY NOT BE AT FINAL GRADE BUT WHICH WILL REMAIN UNDISTURBED FOR LONGER THAN 30 DAYS. SOIL STABILIZATION MEASURES INCLUDE VEGETATIVE ESTABLISHMENT, MULCHING AND THE EARLY APPLICATION OF GRAVEL BASE MATERIAL ON AREAS TO BE PAVED.
4. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CONSTRUCTION.
5. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES AND CLEANUP OF SEDIMENTATION ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE MADE IMMEDIATELY.
6. THE CONTRACTOR SHALL LIMIT SITE ACCESS BY CONSTRUCTION VEHICLES TO ENTRANCES PROTECTED BY A STONE CONSTRUCTION ENTRANCE (VESH STD. & SPEC. 3.02) OR AN APPROVED COMPARABLE CONTROL MEASURE. SEDIMENT SHALL BE REMOVED FROM PAVED AREAS ON A DAILY BASIS.
7. STOCK PILES OF SOIL AND OTHER ERODIBLE MATERIALS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION FOR STOCKPILES ON SITE AS WELL AS FOR MATERIALS TRANSPORTED FROM THE PROJECT SITE.
8. THE CONTRACTOR SHALL MONITOR AND TAKE PRECAUTIONS TO CONTROL DUST INCLUDING (BUT NOT LIMITED TO) USE OF WATER, MULCH, OR CHEMICAL DUST ADHESIVES AND CONTROL OF CONSTRUCTION SITE TRAFFIC.
9. EFFLUENT FROM DE-WATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT ADJACENT PROPERTIES, WETLANDS, WATERWAYS OR THE STORM DRAINAGE SYSTEM.
10. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION AND MAINTENANCE OF ANY ADDITIONAL CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED NECESSARY BY THE PLAN APPROVING AUTHORITY.
11. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES ARE NOT TO BE REMOVED UNTIL ALL DISTURBED AREAS ARE STABILIZED. AFTER STABILIZATION IS COMPLETE, ALL MEASURES SHALL BE REMOVED WITHIN 30 DAYS. TRAPPED SEDIMENT SHALL BE SPREAD AND SEED.

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ROLAND PARK OVERPASS BRIDGE
RAMP IMPROVEMENTS
ADDITIVE ALTERNATE #1
DEPARTMENT OF PUBLIC WORKS
CITY OF NORFOLK, VIRGINIA

CN NO: 4183
DATE: 1/03/13
DESIGN: JLB
DRAWN: BJL
REVIEW: CAR

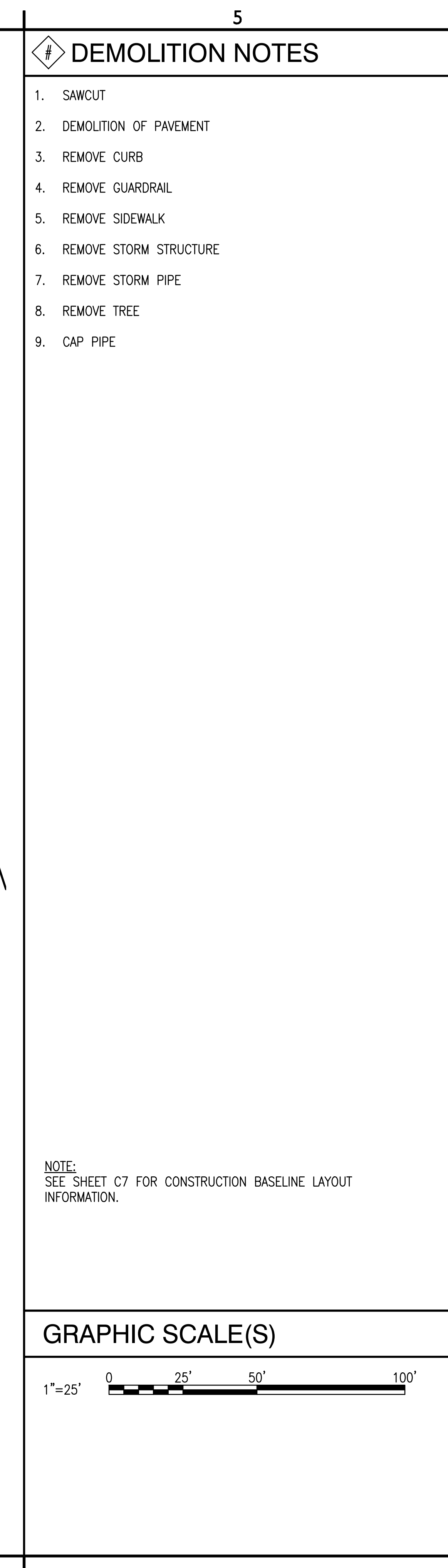
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SOIL EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

C4

SHEET 5 OF 16

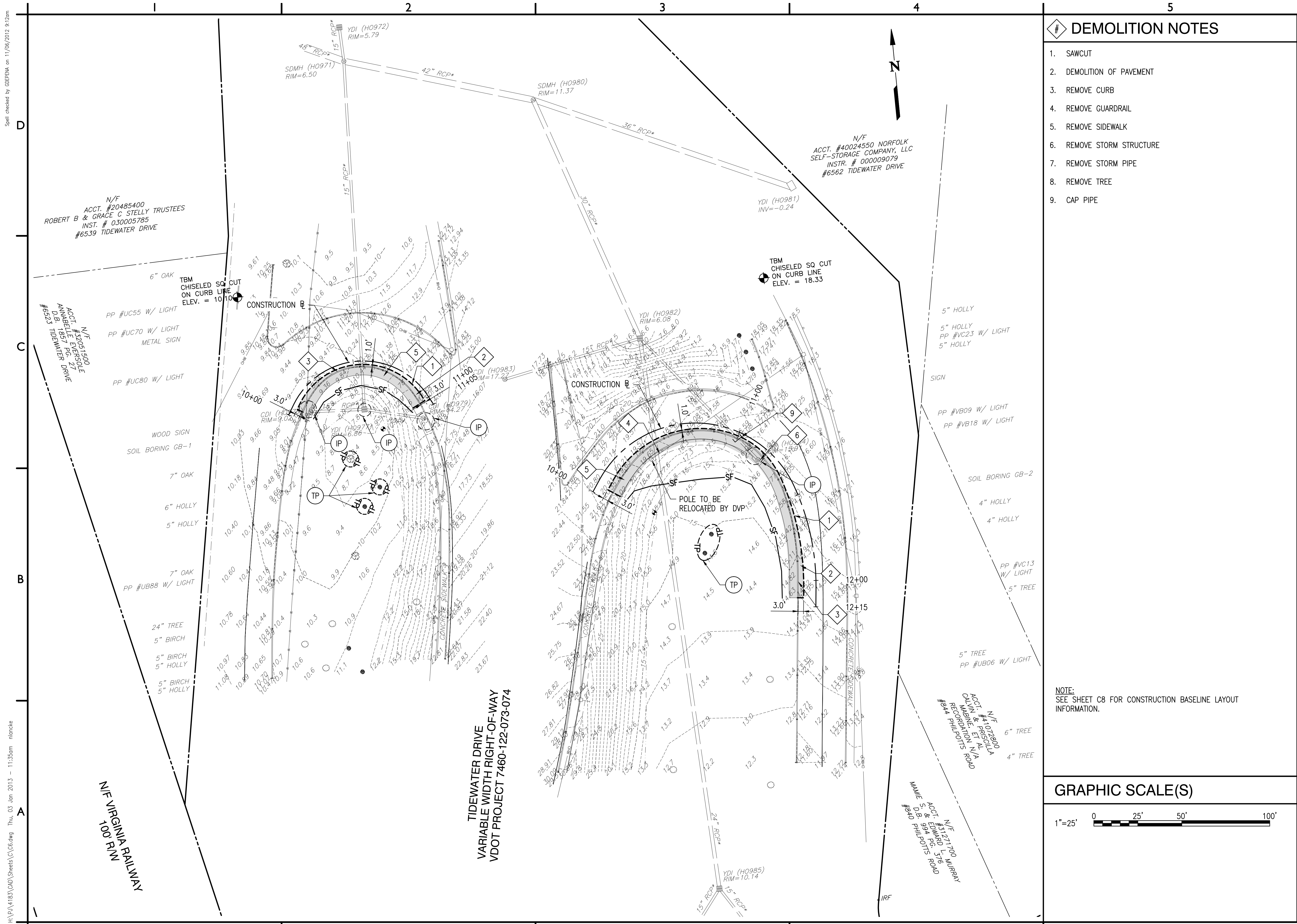
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SHEET 6 OF 16

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DEMOLITION NOTES

1. SAWCUT
2. DEMOLITION OF PAVEMENT
3. REMOVE CURB
4. REMOVE GUARDRAIL
5. REMOVE SIDEWALK
6. REMOVE STORM STRUCTURE
7. REMOVE STORM PIPE
8. REMOVE TREE
9. CAP PIPE

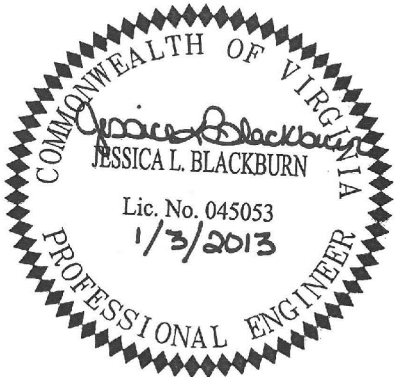
NOTE:
SEE SHEET C8 FOR CONSTRUCTION BASELINE LAYOUT
INFORMATION.

GRAPHIC SCALE(S)

1"=25' 0 25' 50' 100'

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ROLAND PARK OVERPASS BRIDGE RAMP IMPROVEMENTS ADDITIVE ALTERNATE #1

DEPARTMENT OF PUBLIC WORKS
CITY OF NORFOLK, VIRGINIA

CN NO: 4183
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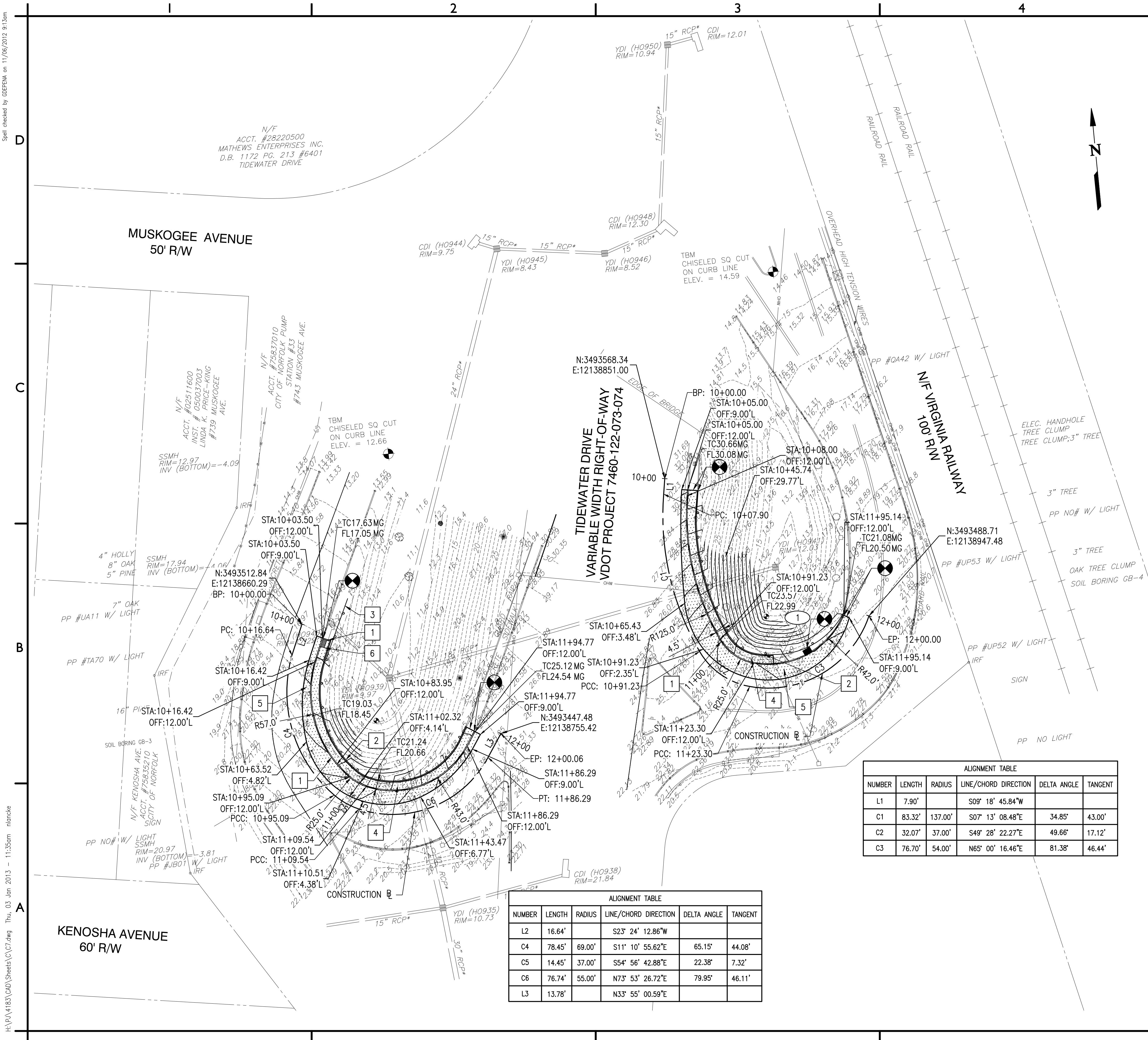
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No.	Date	Description

SOIL EROSION SEDIMENT CONTROL & DEMO PLAN C6

SHEET 7 OF 16

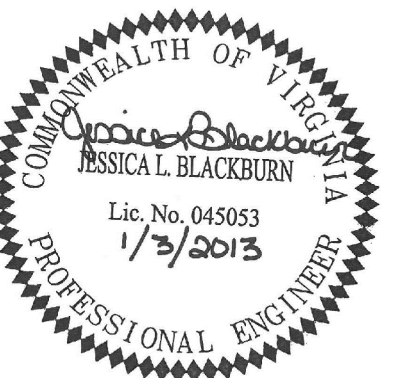
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ROLAND PARK OVERPASS BRIDGE
RAMP IMPROVEMENTS
ADDITIVE ALTERNATE #1
DEPARTMENT OF PUBLIC WORKS
CITY OF NORFOLK, VIRGINIA

CN NO: 4183
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REVIEW: CAR

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No. Date Description By

GRAPHIC SCALE(S)



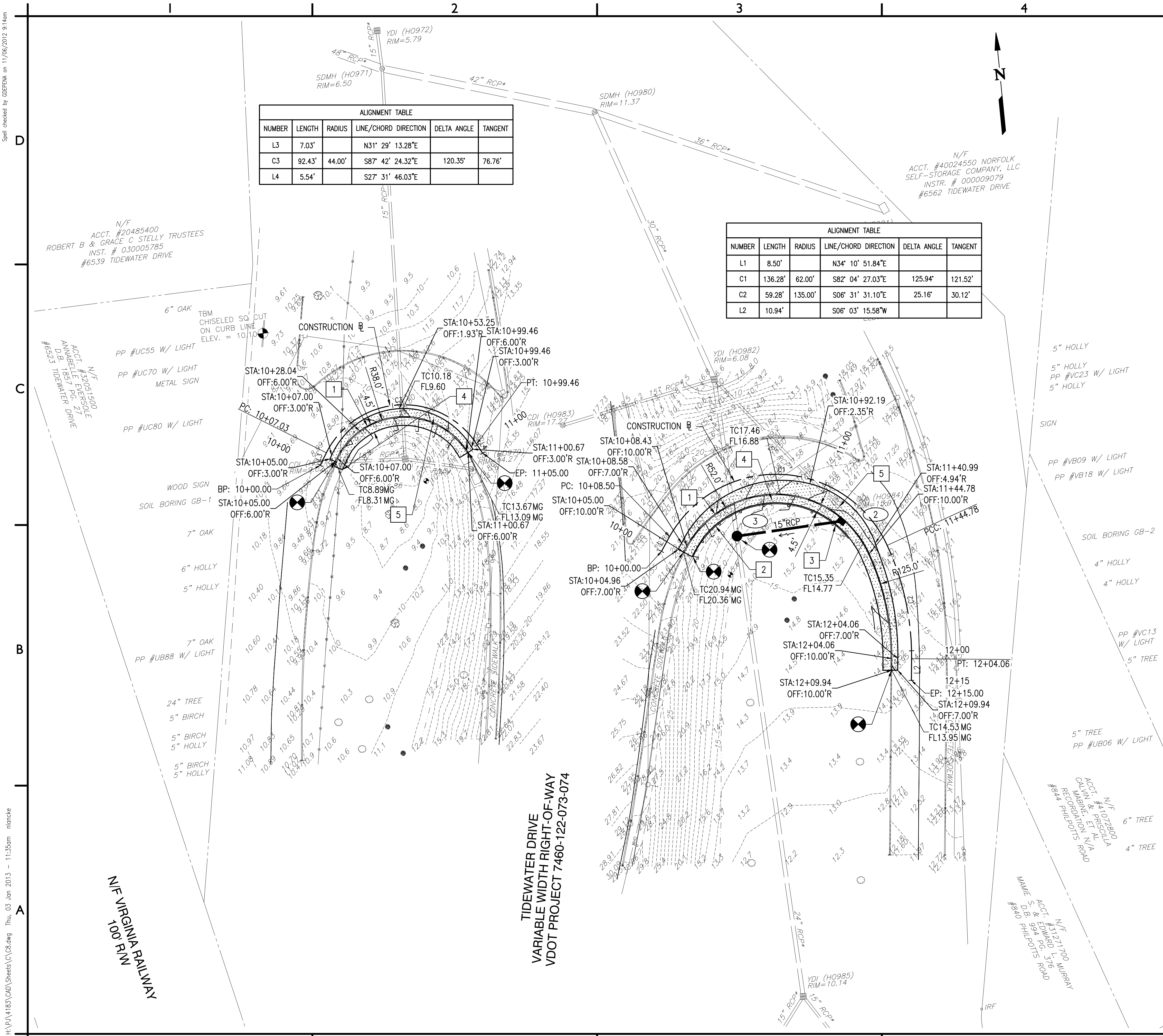
IMPROVEMENT & GRADING PLAN

C7

SHEET 8 OF 16

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CONSTRUCTION NOTES

1. CURB, NORFOLK STD HS-201
2. GUARDRAIL, VDOT STD GR-2
3. GUARDRAIL TERMINAL, VDOT STD GR-9
4. SIDEWALK, NORFOLK MOD HS-206
5. PLAIN HYDRAULIC CEMENT CONCRETE PAVEMENT (10")
6. HANDICAP RAMP, VDOT STD CG12B

GENERAL NOTES

1. CONTRACTOR TO CONTACT CITY OF NORFOLK, ENVIRONMENTAL STORM WATER MANAGEMENT AT 823-4000 (48 HOURS NOTICE) FOR TIE-IN INSPECTION TO ANY OF THE CITY OF NORFOLK STORM WATER INFRASTRUCTURE.

- 2 VDOT STD DI-3B, L=12'
RIM=15.28
INV OUT=
- 2 3 53LF - 15" RCP
INV IN=
INV OUT=
- 3 VDOT STD MH-1
RIM=17.50
INV OUT=

*SEE NOTE 36 ON SHEET C1

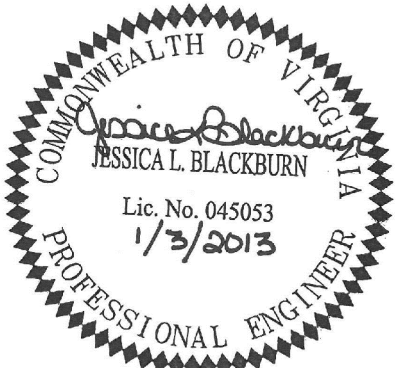
GRAPHIC SCALE(S)

1"=25' 0 25' 50' 100'

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ROLAND PARK OVERPASS BRIDGE

RAMP IMPROVEMENTS ADDITIVE ALTERNATE #1

DEPARTMENT OF PUBLIC WORKS
CITY OF NORFOLK, VIRGINIA

CN NO: 4183
DATE: 1/03/13
DESIGN: JLB
DRAWN: BJL
REVIEW: CAR

REVISIONS
No. Date Description By

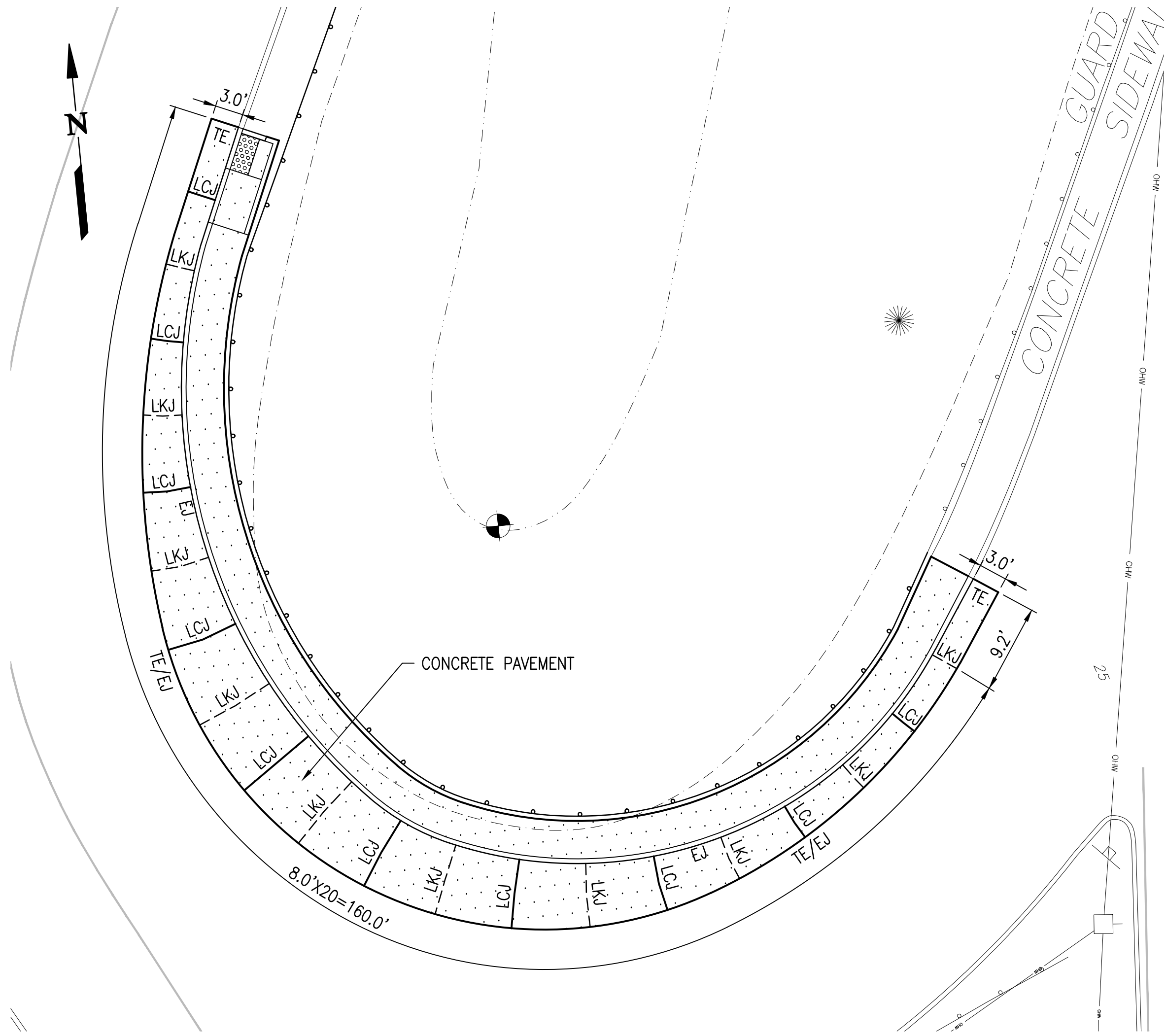
IMPROVEMENT & GRADING PLAN

C8

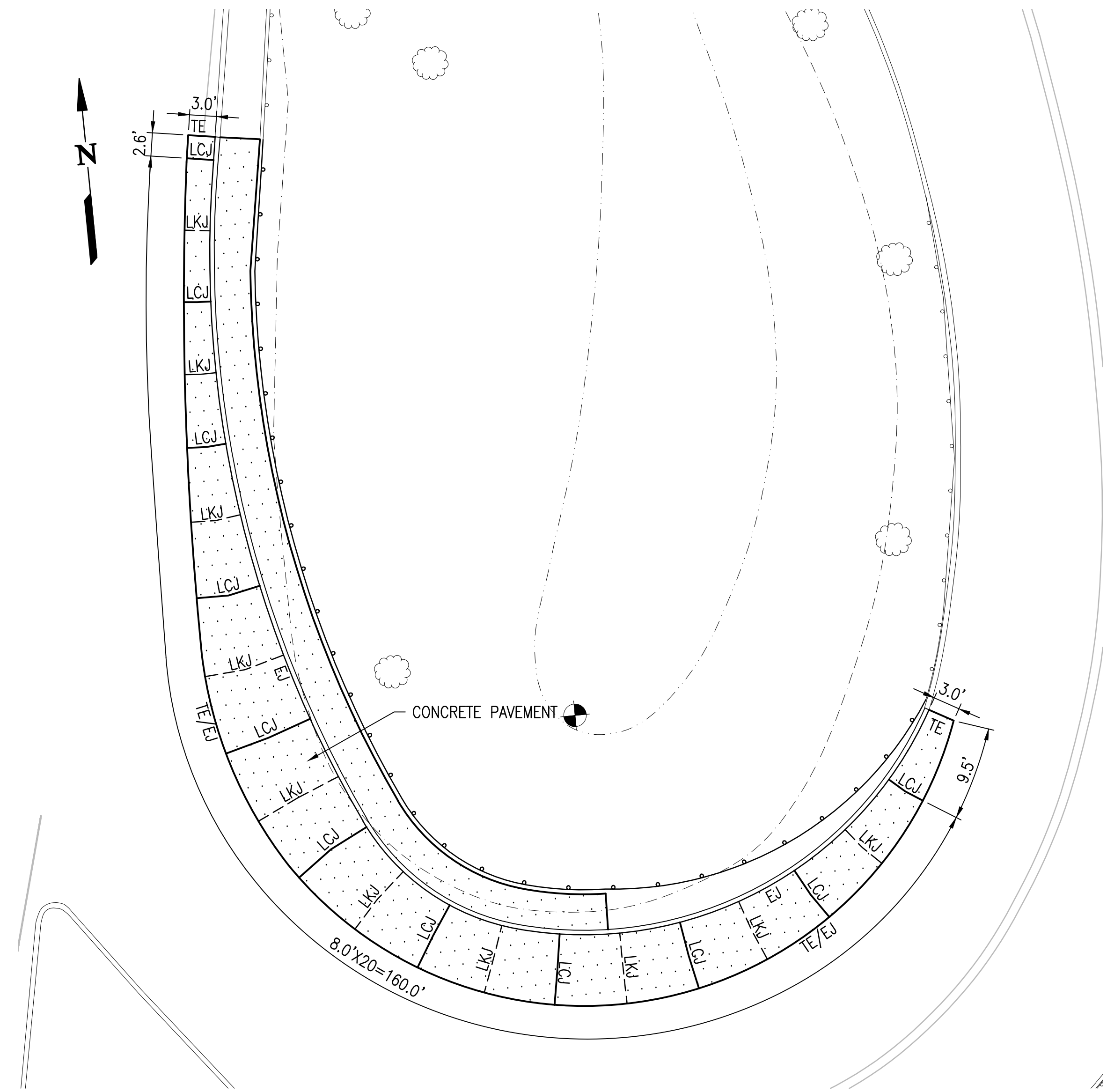
SHEET 9 OF 16

Spell checked by GDFEMA on 11/06/2012 9:16am

H:\P\4183\CAD\Sheets\C9.dwg Thu, 03 Jan 2013 -- 11:35am nlcncle



CONCRETE PAVEMENT JOINT LAYOUT - SOUTHWEST RAMP
SCALE: 1"=10'



CONCRETE PAVEMENT JOINT LAYOUT - SOUTHEAST RAMP
SCALE: 1"=10'

NOTES

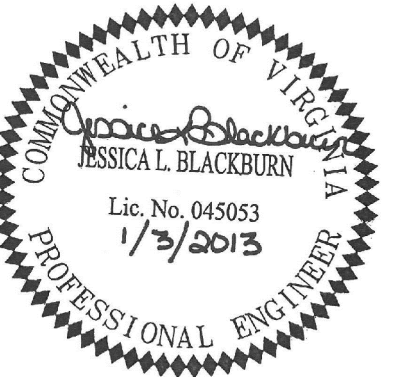
1. CONSTRUCTION JOINTS SHALL BE USED AT THE END OF EACH DAY PLACING OPERATION AND WHEN PLACEMENT IS INTERRUPTED FOR 30 MINUTES OR LONGER

GRAPHIC SCALE(S)



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**ROLAND PARK OVERPASS BRIDGE
RAMP IMPROVEMENTS
ADDITIVE ALTERNATE #1**

DEPARTMENT OF PUBLIC WORKS
CITY OF NORFOLK, VIRGINIA

CN NO: 4183
DATE: 1/03/13
DESIGN: JLB
DRAWN: BJL
REVIEW: CAR

REVISIONS		
No.	Date	Description

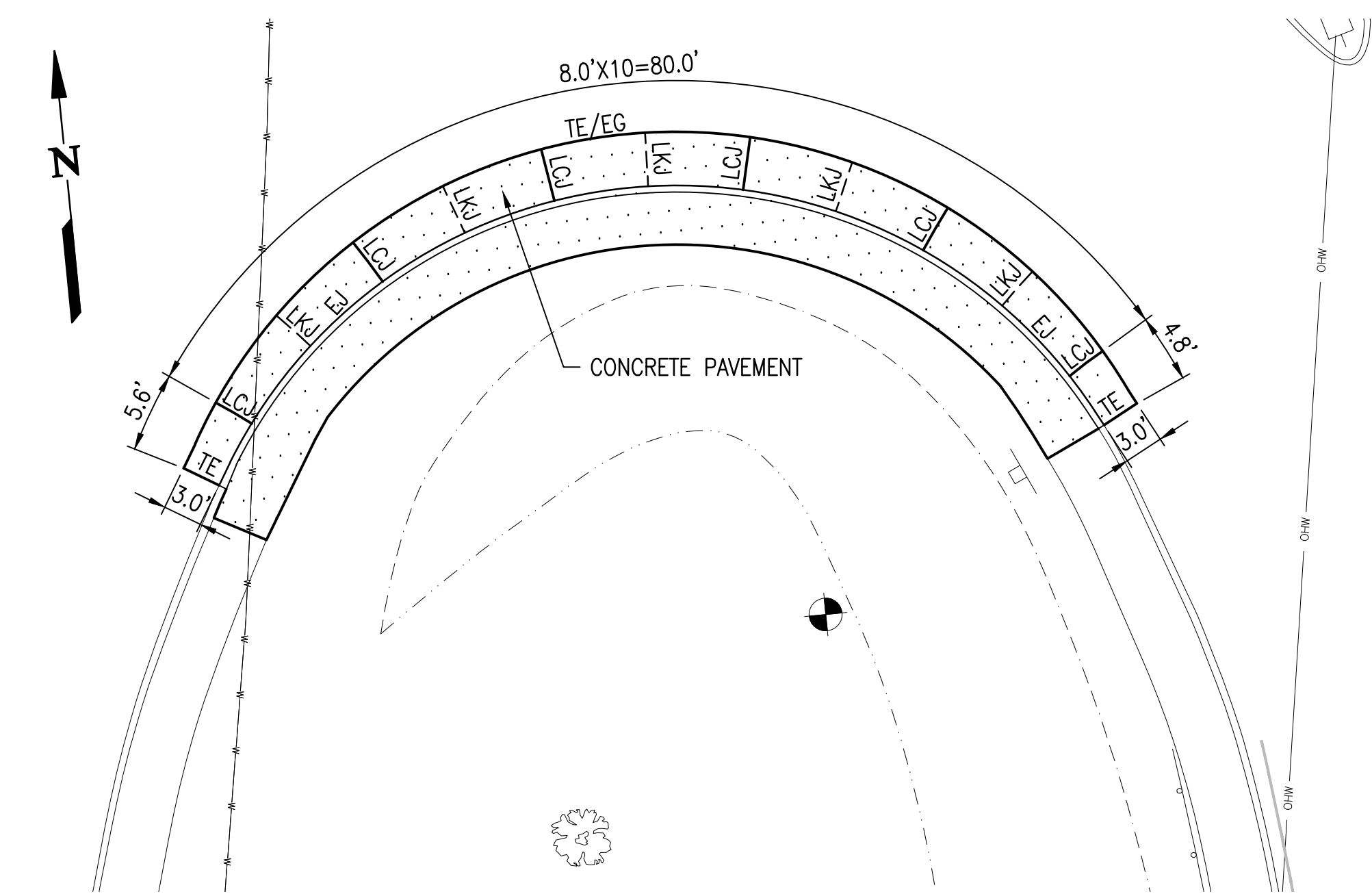
PAVING PLAN

C9

SHEET 10 OF 16

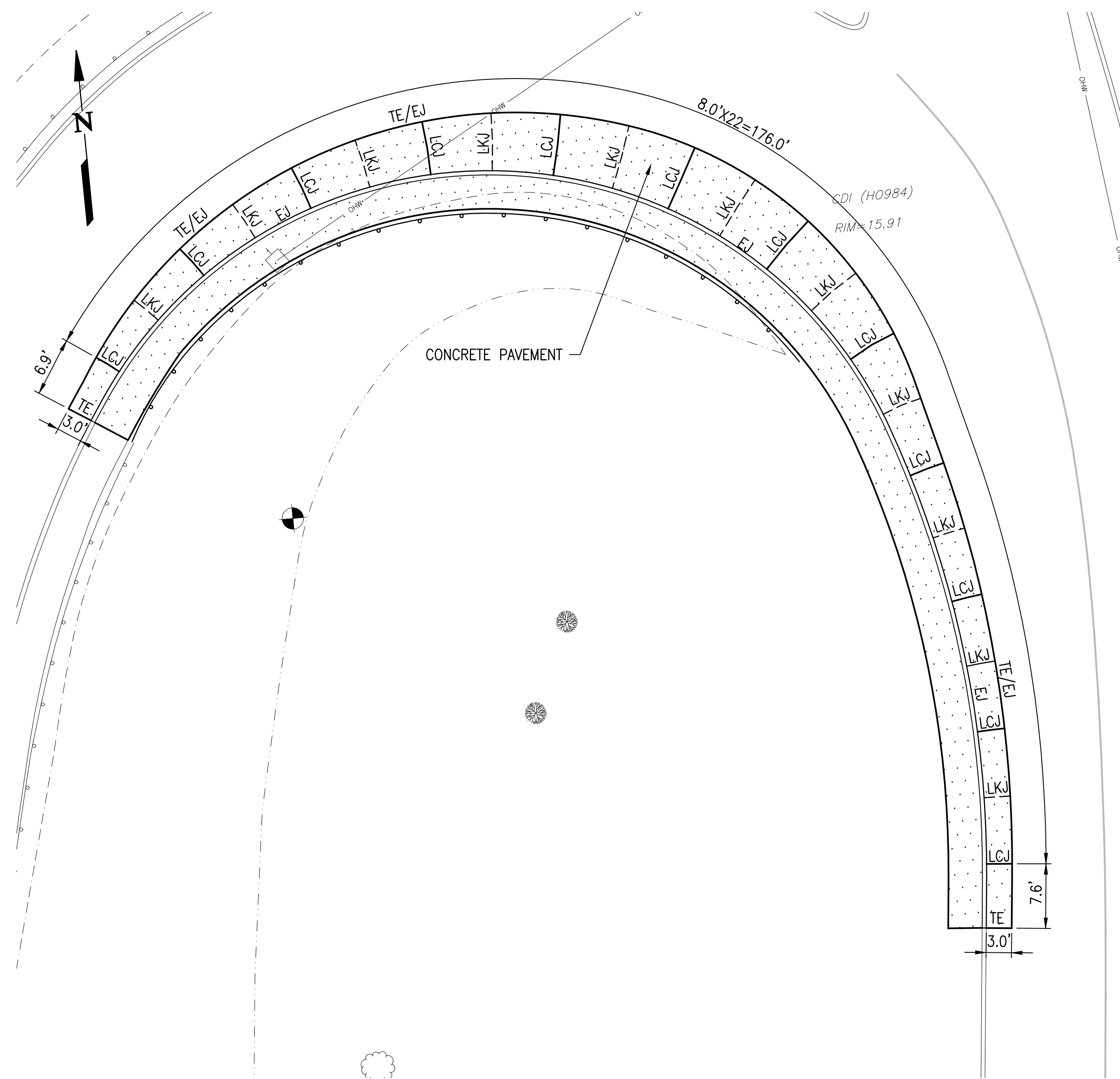
Spell checked by GDFEMA on 11/06/2012 9:17am

H:\P\4183\CAD\Sheets\C10.dwg Thu, 03 Jun 2013 - 11:36am nlancke



CONCRETE PAVEMENT JOINT LAYOUT - NORTHWEST RAMP

SCALE: 1"=10'



CONCRETE PAVEMENT JOINT LAYOUT - NORTHEAST RAMP

SCALE: 1"=10'

NOTES

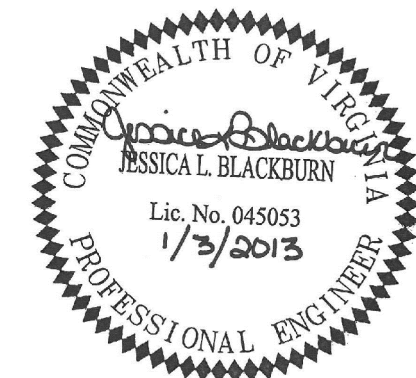
1. CONSTRUCTION JOINTS SHALL BE USED AT THE END OF EACH DAY PLACING OPERATION AND WHEN PLACEMENT IS INTERRUPTED FOR 30 MINUTES OR LONGER

GRAPHIC SCALE(S)



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**ROLAND PARK OVERPASS BRIDGE
RAMP IMPROVEMENTS
ADDITIVE ALTERNATE #1**

DEPARTMENT OF PUBLIC WORKS
CITY OF NORFOLK, VIRGINIA

CN NO: 4183
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REVIEW: CAR

REVISIONS
No. Date Description By

PAVING PLAN

C10

SHEET 11 OF 16

D

C

B

A

TABLE 3.31-B (Revised June 2003) TEMPORARY SEEDING SPECIFICATIONS QUICK REFERENCE FOR ALL REGIONS		
APPLICATION DATES	SEED	APPLICATION RATES
Sept. 1 - Feb. 15	50/50 Mix of Annual Ryegrass (lolium multi-florum) & Cereal (Winter) Rye (Secale cereale)	50 - 100 (lbs/acre)
Feb. 16 - Apr. 30	Annual Ryegrass (lolium multi-florum)	60 - 100 (lbs/acre)
May 1 - Aug. 31	German Millet	50 (lbs/acre)
FERTILIZER & LIME		
<ul style="list-style-type: none"> Apply 10-10-10 fertilizer at a rate of 450 lbs. / acre (or 10 lbs. / 1,000 sq. ft.) Apply Pulverized Agricultural Limestone at a rate of 2 tons/acre (or 90 lbs. / 1,000 sq. ft.) 		
NOTE: 1 - A soil test is necessary to determine the actual amount of lime required to adjust the soil pH of site. 2 - Incorporate the lime and fertilizer into the top 4 - 6 inches of the soil by disking or by other means. 3 - When applying Slowly Available Nitrogen, use rates available in Erosion & Sediment Control Technical Bulletin #4, 2003 Nutrient Management for Development Sites at http://www.dcr.state.va.us/sw/so&s.htm#pubs		

NOTE:
CONCRETE SHALL
BE CLASS A3

NORFOLK STANDARD HS-201

NO SCALE

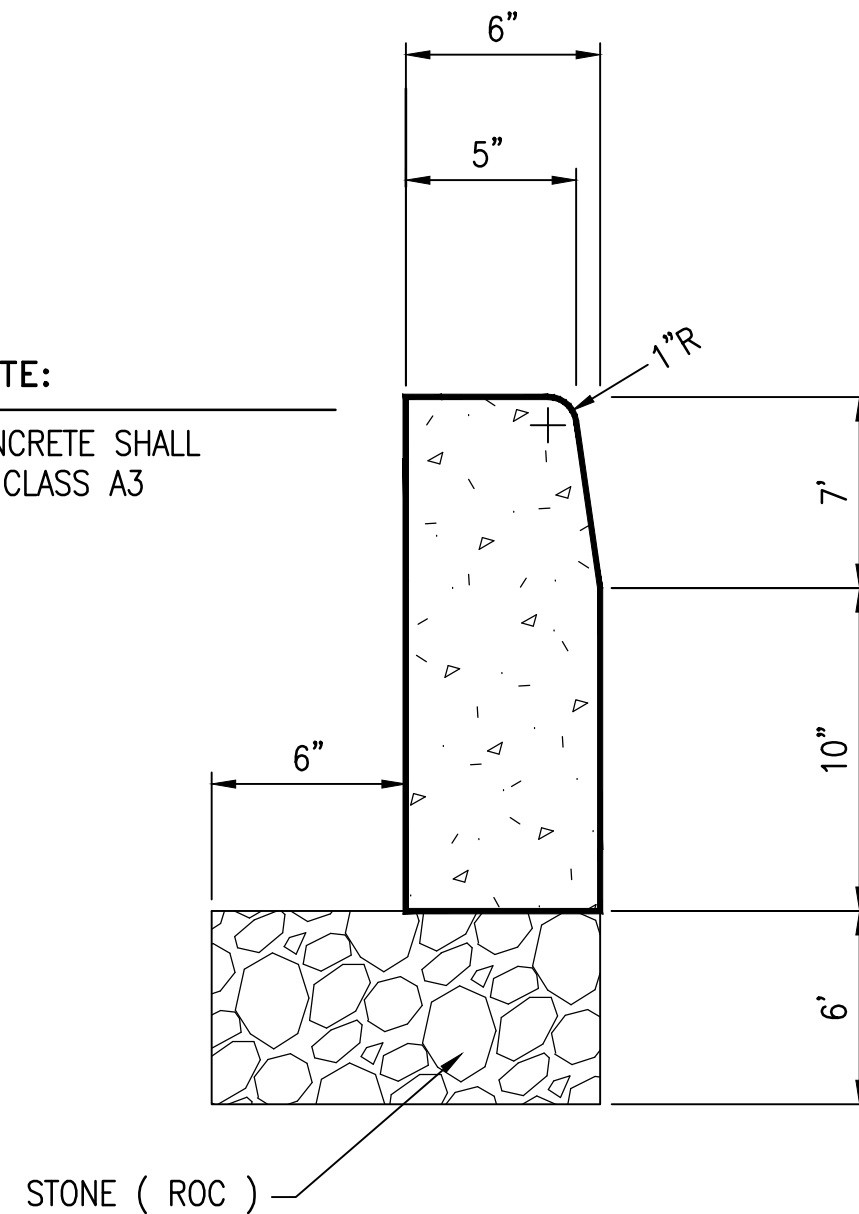
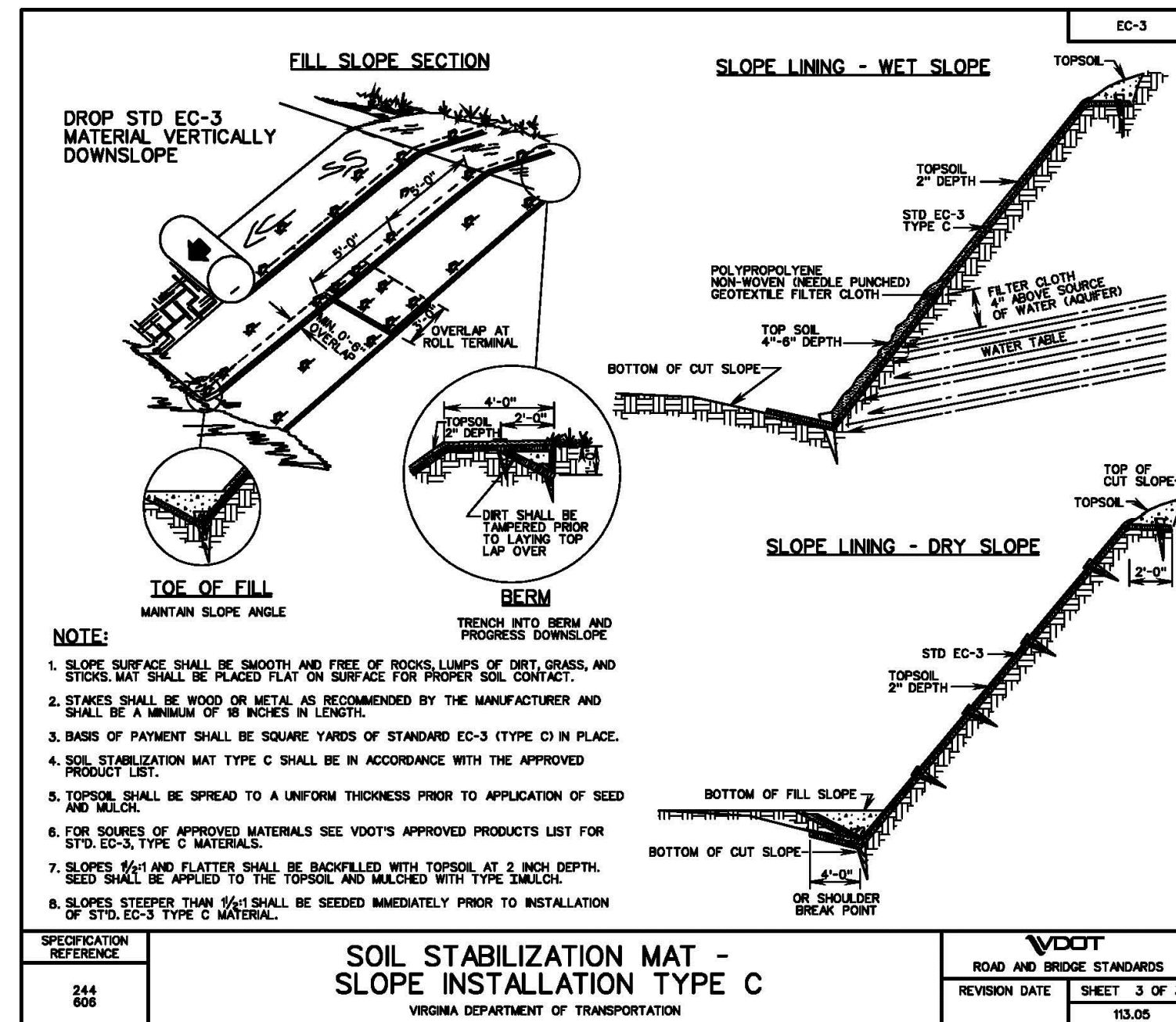


TABLE 3.32-E (Revised June 2003) PERMANENT SEEDING SPECIFICATIONS FOR COASTAL PLAIN AREA		
LAND USE	SEED ¹	APPLICATION RATES
Minimum Care Lawn (Commercial or Residential)	Tall Fescue ¹ or Bermudagrass ¹	175 - 200 lbs. 75 lbs.
High-Maintenance Lawn	Tall Fescue ¹ or Bermudagrass ¹ (seed) or Bermudagrass ¹ (by other vegetative establishment method, see Std. & Spec. 3.34)	200-250 lbs. 40 lbs. (unhulled) 30 lbs. (hulled)
General Slope (3:1 or less)	Tall Fescue ¹ Red Top Grass or Creeping Red Fescue Seasonal Nurse Crop ²	128 lbs. 2 lbs. 20 lbs. TOTAL: 150 lbs.
Low-Maintenance Slope (Sleeper than 3:1)	Tall Fescue ¹ Bermudagrass ¹ Red Top Grass or Creeping Red Fescue Seasonal Nurse Crop ² Sericea Lespedeza ³	93-108 lbs. 0-15 lbs. 2 lbs. 20 lbs. 20 lbs. TOTAL: 150 lbs.
NOTE: 1 - When selecting varieties of turfgrass, use the Virginia Crop Improvement Association (VCIA) recommended turfgrass variety list. Quality seed will bear a label indicating that they are approved by VCIA. A current turfgrass variety list is available at the local County Extension office or through VCIA at 804-746-4884 or at http://sudan.ces.vt.edu/turf/turfpublications/publications2.html 2 - Use seasonal nurse crop in accordance with seeding dates as stated below: February, March - April Annual Rye May 1 st - August Foxtail Millet September, October - November 15 th Annual Rye November 16 th - January Winter Rye 3 - May through October, use hulled seed. All other seeding periods, use unhulled seed. If Weeping Lovegrass is used, include in any slope or low maintenance mixture during warmer seeding periods, increase to 30 - 40 lbs/acre.		
FERTILIZER & LIME		
<ul style="list-style-type: none"> Apply 10-20-10 fertilizer at a rate of 500 lbs. / acre (or 12 lbs. / 1,000 sq. ft.) Apply Pulverized Agricultural Limestone at a rate of 2 tons/acre (or 90 lbs. / 1,000 sq. ft.) 		
NOTE: 1 - A soil test is necessary to determine the actual amount of lime required to adjust the soil pH of site. 2 - Incorporate the lime and fertilizer into the top 4 - 6 inches of the soil by disking or by other means. 3 - When applying Slowly Available Nitrogen, use rates available in Erosion & Sediment Control Technical Bulletin #4, 2003 Nutrient Management for Development Sites at http://www.dcr.state.va.us/sw/so&s.htm#pubs		

SOIL STABILIZATION MAT (VDOT TYPE C)

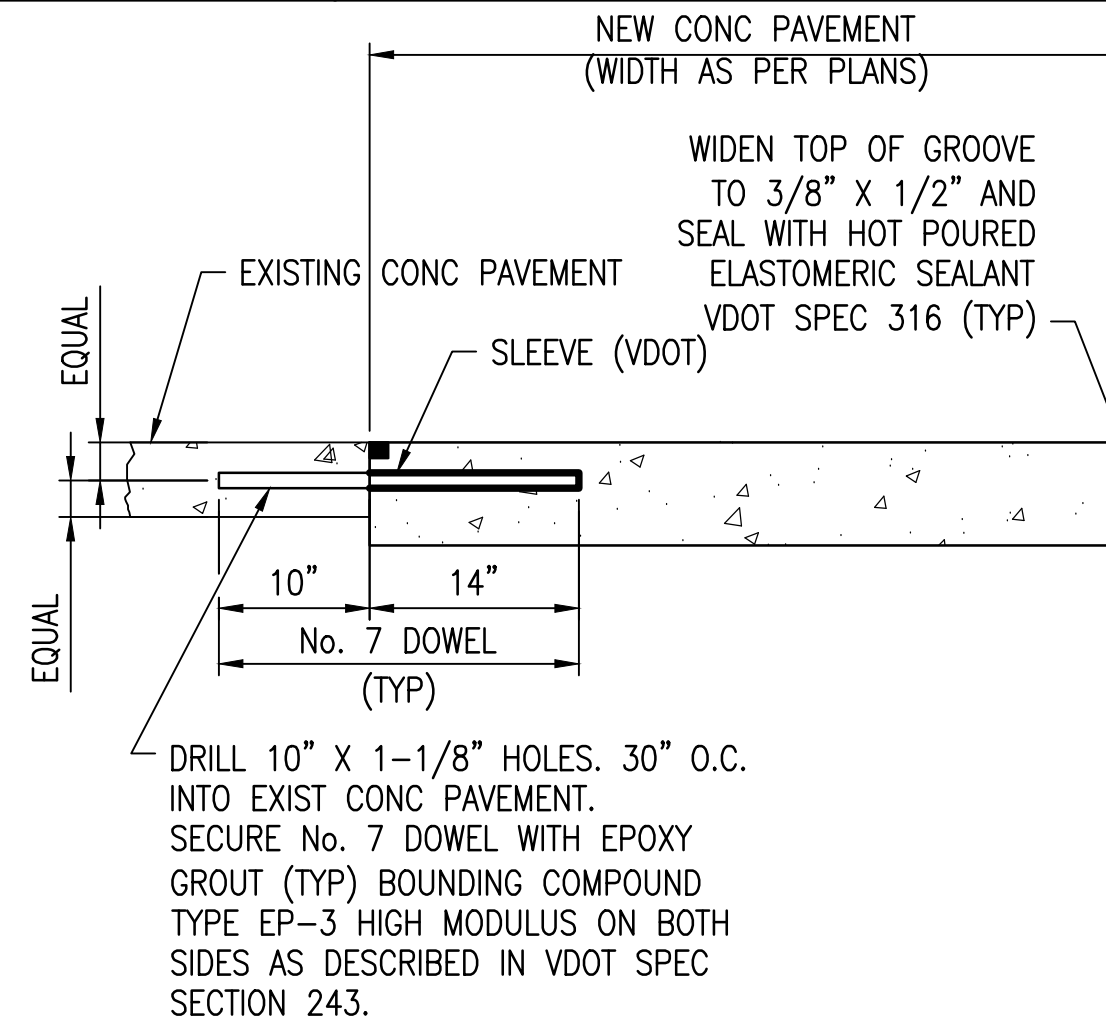
NO SCALE



VDOT
ROAD AND BRIDGE STANDARDS
REVISION DATE SHEET 3 OF 3
113.05

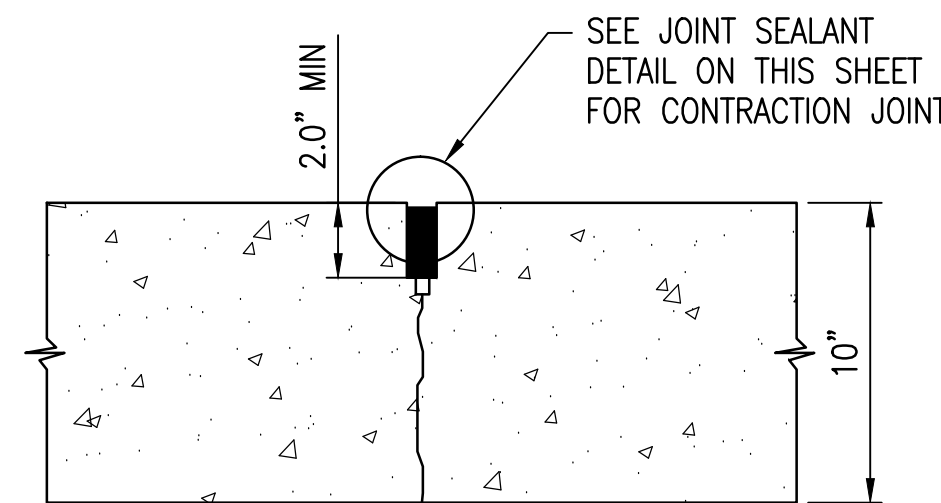
CONCRETE CONSTRUCTION JOINT (LKJ)

NO SCALE



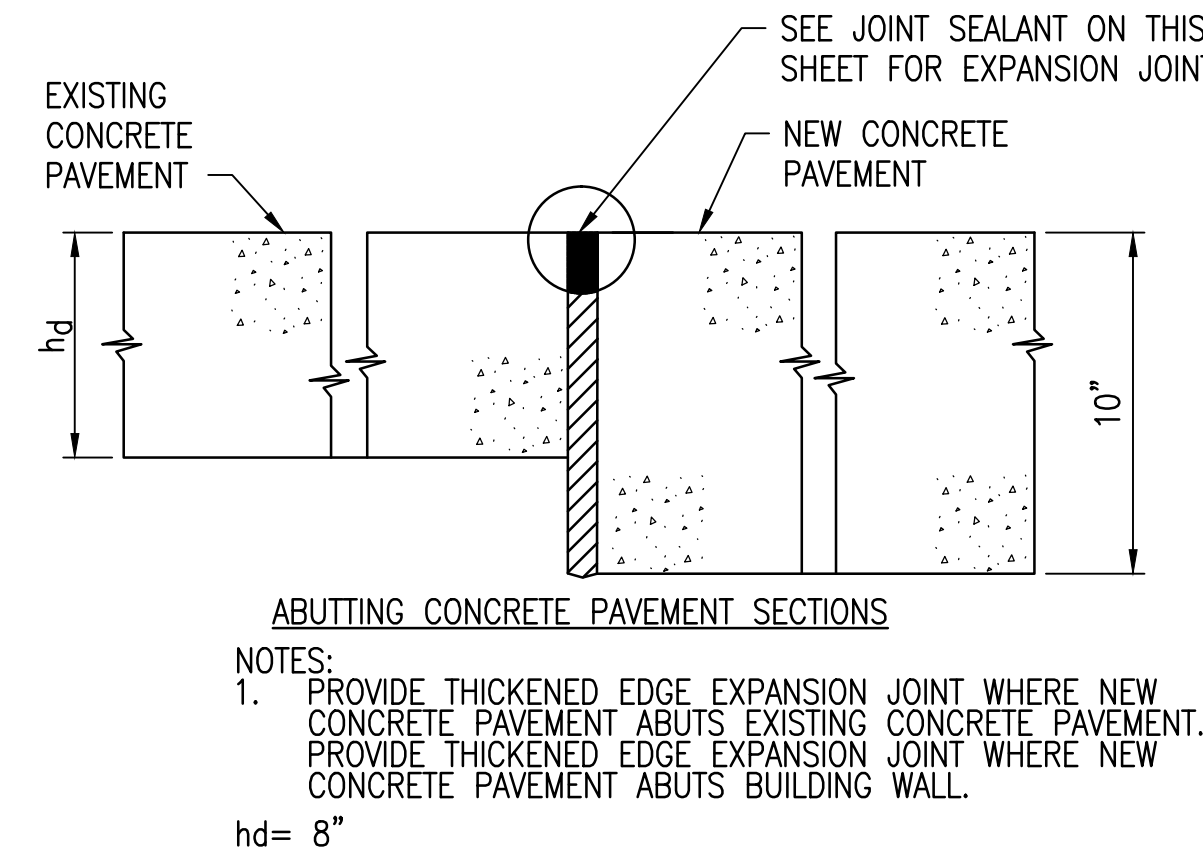
CONTRACTION JOINT (LCJ)

NO SCALE



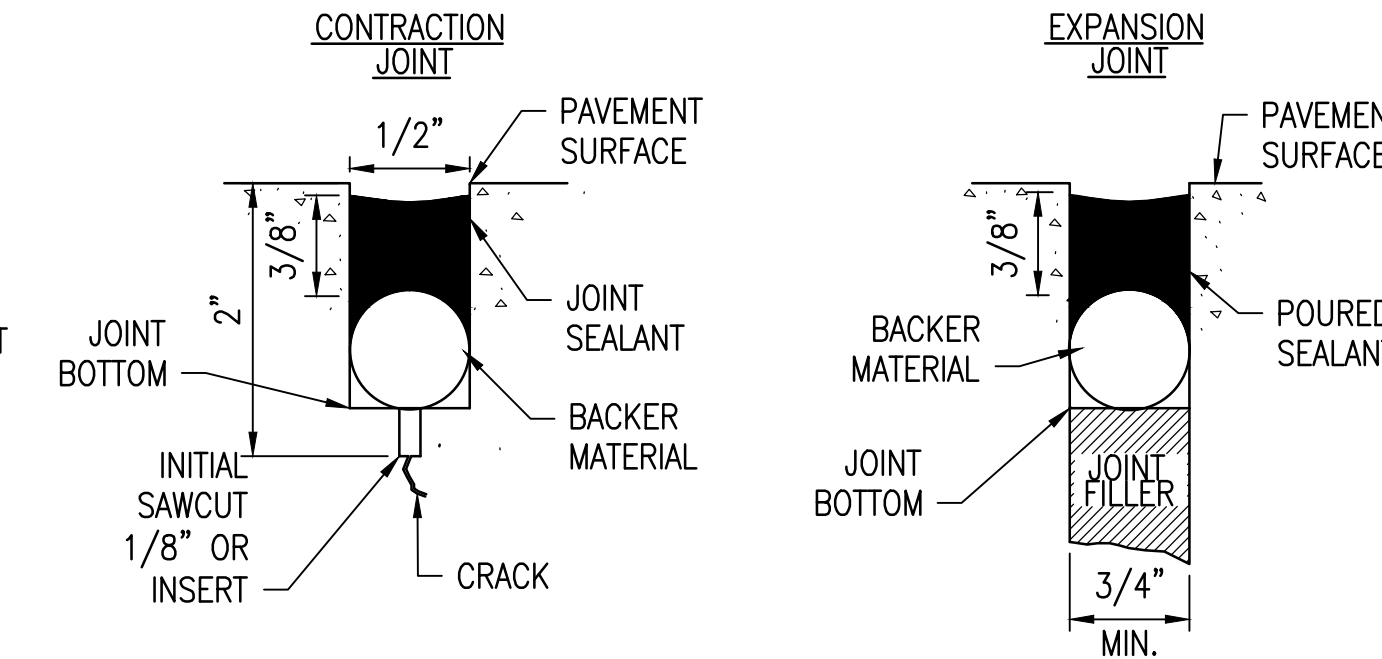
EXPANSION JOINT - THICKENED EDGE (EJ-TE)

NO SCALE



JOINT SEALANT

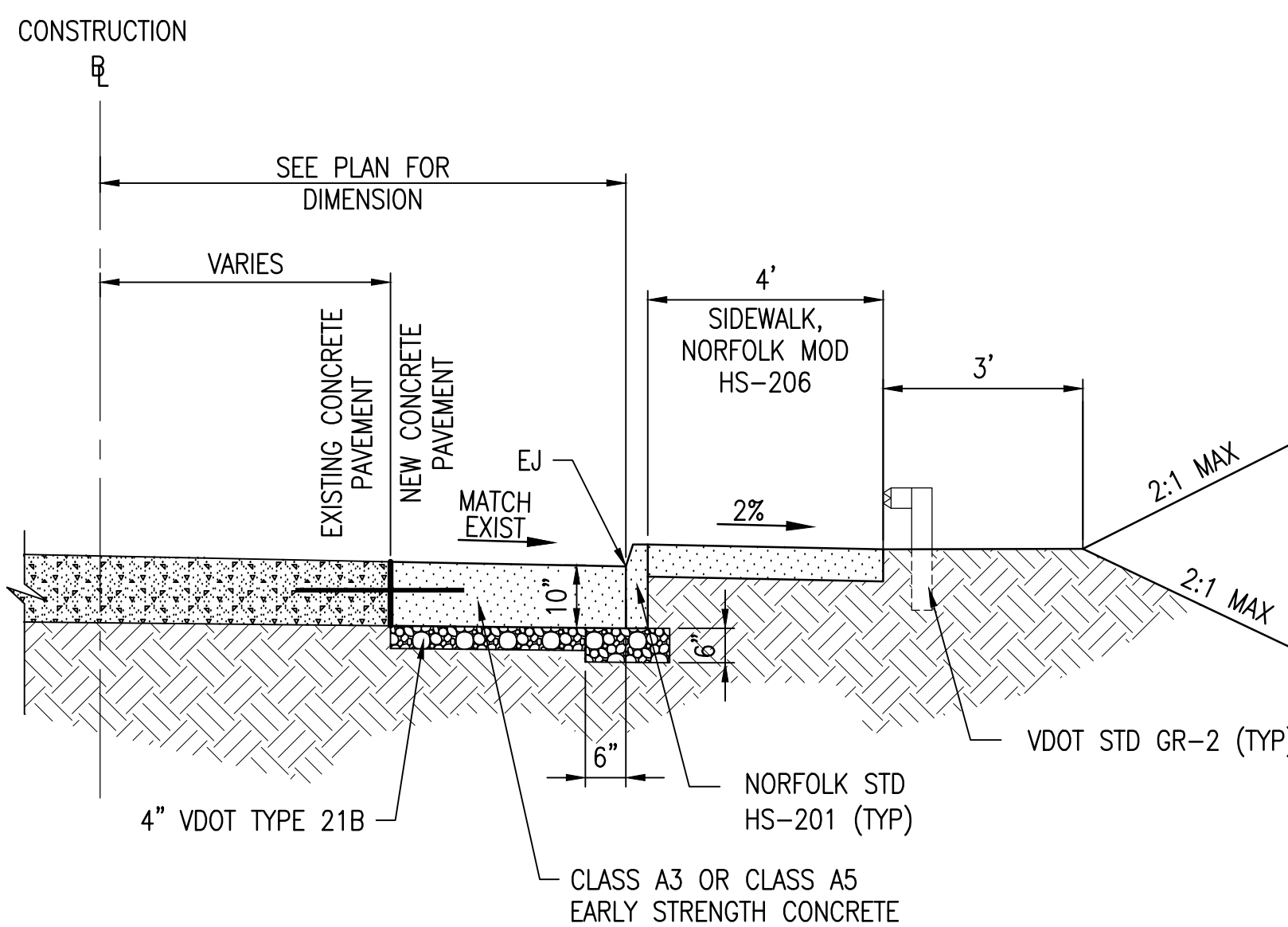
NO SCALE



NOTES ON POURED JOINT SEALANT:
1. TOP OF SEALANT WILL BE 1/4\"/>

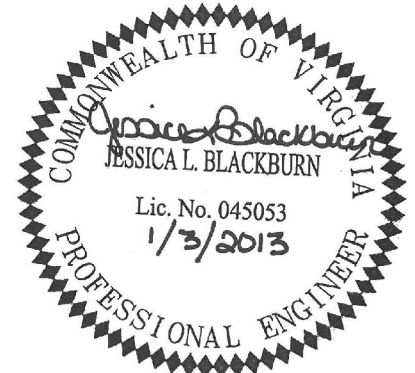
TYPICAL CONCRETE PAVEMENT SECTION

NO SCALE



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ROLAND PARK OVERPASS BRIDGE
RAMP IMPROVEMENTS
ADDITIVE ALTERNATE #1
DEPARTMENT OF PUBLIC WORKS
CITY OF NORFOLK, VIRGINIA

CN NO: 4183
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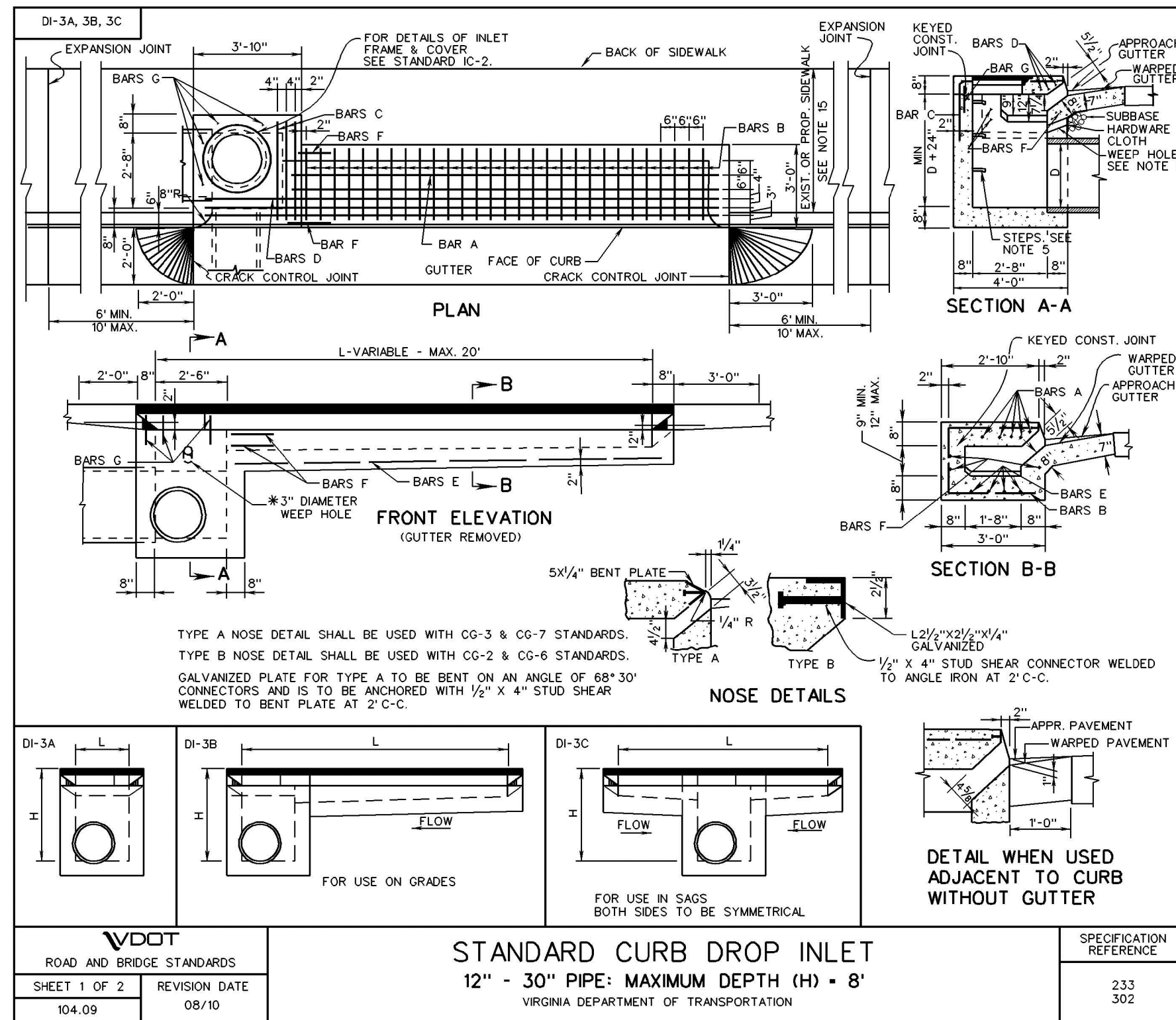
REVISIONS
No. Date Description By

SITE DETAILS

C11

SHEET 12 OF 16

D



C

B

TABLE OF QUANTITIES															DI-3A, 3B, 3C
TYPE	L	AREA OF SLOT	REINFORCING STEEL												WEIGHT
			CONCRETE	BARS A	BARS B	BARS C	BARS D	BARS E	BARS F	BARS G	BARS H	BARS I	BARS J	BARS K	
DI-3A	2'-0"	1.0	2.08	1-5"	2-5"	3-5"	4-5"	5-5"	6-5"	7-5"	8-5"	9-5"	10-5"	11-5"	22
DI-3B	4'	1.83	2.68	5	1-5"	2-5"	3-5"	4-5"	5-5"	6-5"	7-5"	8-5"	9-5"	10-5"	84
	6'	2.75	3.02	5	2-5"	3-5"	4-5"	5-5"	6-5"	7-5"	8-5"	9-5"	10-5"	11-5"	111
	8'	3.67	3.45	5	3-5"	4-5"	5-5"	6-5"	7-5"	8-5"	9-5"	10-5"	11-5"	12-5"	158
	10'	4.58	3.90	5	4-5"	5-5"	6-5"	7-5"	8-5"	9-5"	10-5"	11-5"	12-5"	13-5"	204
	12'	5.50	4.34	5	5-5"	6-5"	7-5"	8-5"	9-5"	10-5"	11-5"	12-5"	13-5"	14-5"	251
	14'	6.42	4.78	5	6-5"	7-5"	8-5"	9-5"	10-5"	11-5"	12-5"	13-5"	14-5"	15-5"	298
	16'	7.33	5.22	5	7-5"	8-5"	9-5"	10-5"	11-5"	12-5"	13-5"	14-5"	15-5"	16-5"	345
	18'	8.25	5.68	5	8-5"	9-5"	10-5"	11-5"	12-5"	13-5"	14-5"	15-5"	16-5"	17-5"	392
	20'	9.17	6.09	5	9-5"	10-5"	11-5"	12-5"	13-5"	14-5"	15-5"	16-5"	17-5"	18-5"	438
DI-3C	6'	2.75	3.01	10	1-5"	2-5"	3-5"	4-5"	5-5"	6-5"	7-5"	8-5"	9-5"	10-5"	111
	8'	3.67	3.45	10	2-5"	3-5"	4-5"	5-5"	6-5"	7-5"	8-5"	9-5"	10-5"	11-5"	158
	10'	4.58	3.90	10	3-5"	4-5"	5-5"	6-5"	7-5"	8-5"	9-5"	10-5"	11-5"	12-5"	204
	12'	5.50	4.33	10	4-5"	5-5"	6-5"	7-5"	8-5"	9-5"	10-5"	11-5"	12-5"	13-5"	251
	14'	6.42	4.77	10	5-5"	6-5"	7-5"	8-5"	9-5"	10-5"	11-5"	12-5"	13-5"	14-5"	298
	16'	7.33	5.21	10	6-5"	7-5"	8-5"	9-5"	10-5"	11-5"	12-5"	13-5"	14-5"	15-5"	345
	18'	8.25	5.65	10	7-5"	8-5"	9-5"	10-5"	11-5"	12-5"	13-5"	14-5"	15-5"	16-5"	392
	20'	9.17	6.09	10	8-5"	9-5"	10-5"	11-5"	12-5"	13-5"	14-5"	15-5"	16-5"	17-5"	438

NOTES

- DEPTH OF INLET (H) TO BE SHOWN ON PLANS.
- THE "H" DIMENSION SHOWN ON THE STANDARDS AND SPECIFIED ON THE PLANS SHALL BE MEASURED FROM THE INVERT OF THE OUTFALL PIPE TO THE TOP OF THE STRUCTURE.
- WHEN SPECIFIED ON THE PLANS THE INVERT IS TO BE SHOWN IN ACCORDANCE WITH STANDARD IS-1. THE COST OF FURNISHING AND PLACING ALL MATERIALS INCIDENTAL TO THE STRUCTURE SHALL BE INCLUDED IN THE BID PRICE FOR THE STRUCTURE.
- IN THE EVENT THE INVERT OF THE OUTFALL PIPE IS HIGHER THAN THE BOTTOM OF THE STRUCTURE, THE INVERT OF THE STRUCTURE SHALL BE SHOWN WITH CEMENT MORTAR TO PREVENT STANDING OR POOLING OF WATER IN THE STRUCTURE. THE COST OF FURNISHING AND PLACING ALL MATERIALS INCIDENTAL TO THE STRUCTURE SHALL BE INCLUDED IN THE BID PRICE FOR THE STRUCTURE.
- STEPS ARE TO BE PROVIDED WHEN H IS 4'-0" OR GREATER. FOR DETAILS SEE STANDARD ST-1.
- THIS ITEM MAY BE PRECAST OR CAST-IN-PLACE.
- 4" x 8" SMOOTH DOWELS AT APPROXIMATELY 12" C-C TO BE PLACED IN ALL AREAS ADJACENT TO ADJUTING CONCRETE TO PREVENT SETTLEMENT.
- 3" DIAMETER WEEP HOLE TO BE LOCATED TO DRAIN SURFACE MATERIAL. WEEP HOLE WITH 1/2" DIA. PLASTIC OR HARDWARE CLOTH 1/4" MESH OR GALVANIZED STEEL WIRE MINIMUM WIRE DIAMETER 0.025 INCHES. HARDWARE CLOTH ANCHORED FULLY TO THE OUTSIDE OF THE STRUCTURE.
- ALL REINFORCING STEEL SHALL HAVE A MIN. COVER OF 2".
- ALL REINFORCING STEEL TO BE CUT CLEAR OF ALL OPENINGS BY 2".
- CAST-IN PLACE CONCRETE IS TO BE CLASS AS C3000 PSI. PRECAST CONCRETE IS TO BE 4000 PSI.
- LENGTH OF SLOT (L) WILL, IN EVERY CASE, BE SHOWN ON PLANS.
- IF INLET IS CONSTRUCTED IN MEDIAN CURB OR WITH MEDIAN CURB CUTTER IS TO BE OMITTED (SEE DETAILS).
- STANDARD INLETS MAY BE CONSTRUCTED WITH CONCRETE BLOCKS IN ACCORDANCE WITH DETAILS SHOWN ON STANDARD DRAWING DI-MB.
- THIS AREA MAY BE EARTHEN IN WHICH CASE THE EXPANSION JOINTS WILL APPLY ONLY TO CURB AND GUTTER.
- CONCRETE QUANTITIES SHOWN ARE FOR DEPTH OF 2'-0" WITHOUT PIPES. THE AMOUNT DISPLACED BY PIPES MUST BE DEDUCTED TO OBTAIN TRUE QUANTITIES. DIFFERENT DEPTHS ADD OR SUBTRACT 0.32 CUBIC YARDS OF CONCRETE FOR EACH FOOT OF DEPTH.
- LENGTH OF ANGLE IRON AS SHOWN ON SHEET 1 OF 2 IS TO BE L + 10" AT 4.30 LBS./FT.
- * DENOTES LENGTH OF ONE (1) BAR.
- ALL REINFORCING BARS TO BE #5.
- WHEN INLET IS USED IN 4'-0" MEDIAN, BACK OF INLET IS TO BE SHAPED TO CONFORM TO PROVIDED CURVE.

STANDARD CURB DROP INLET
12" - 30" PIPE: MAXIMUM DEPTH (H) + 8"
VIRGINIA DEPARTMENT OF TRANSPORTATION

VDOT
ROAD AND BRIDGE STANDARDS
REVISION DATE
104.10

SHEET 2 OF 2

A

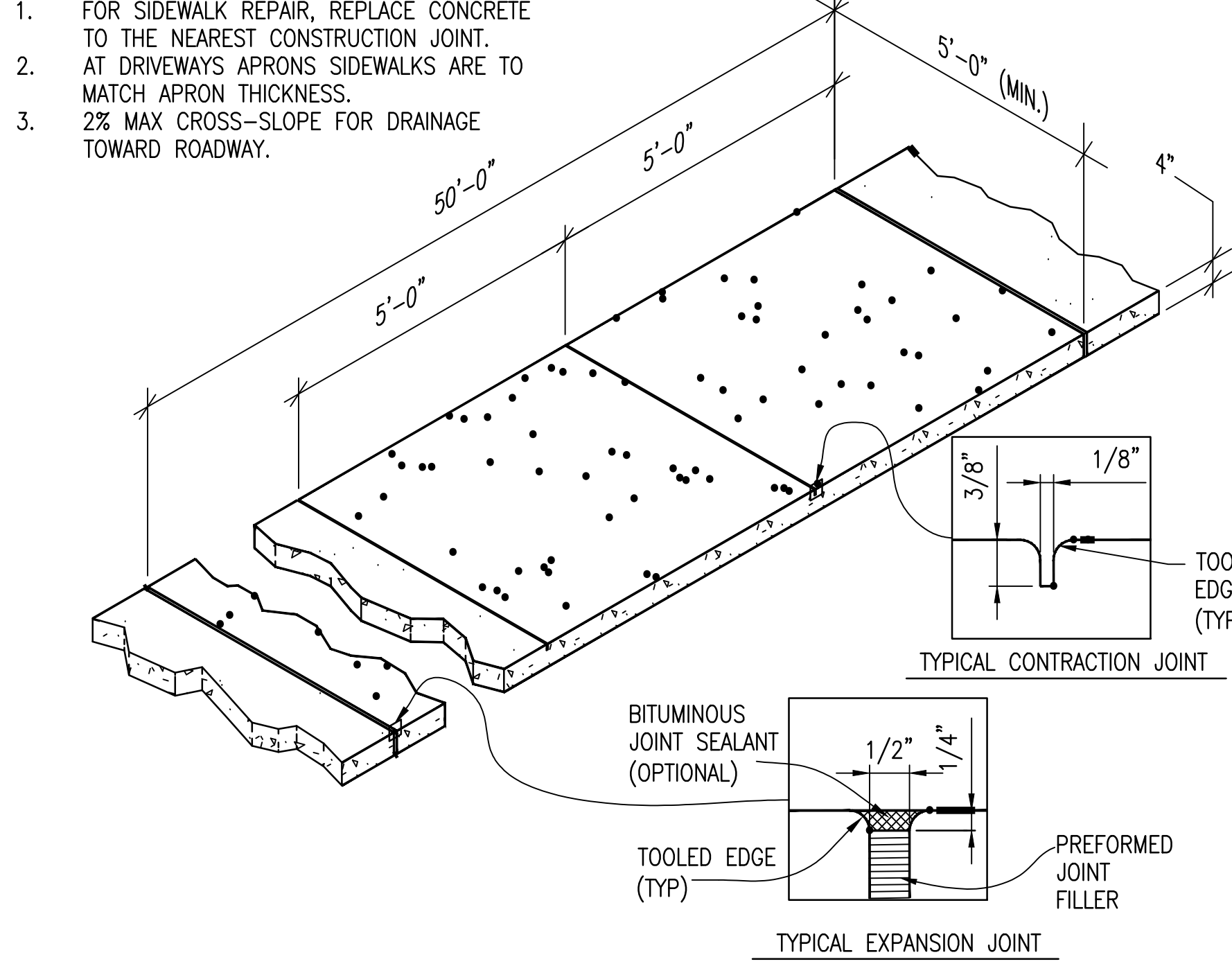
VDOT STD DI-3B, L=10'

NO SCALE

NOTES:

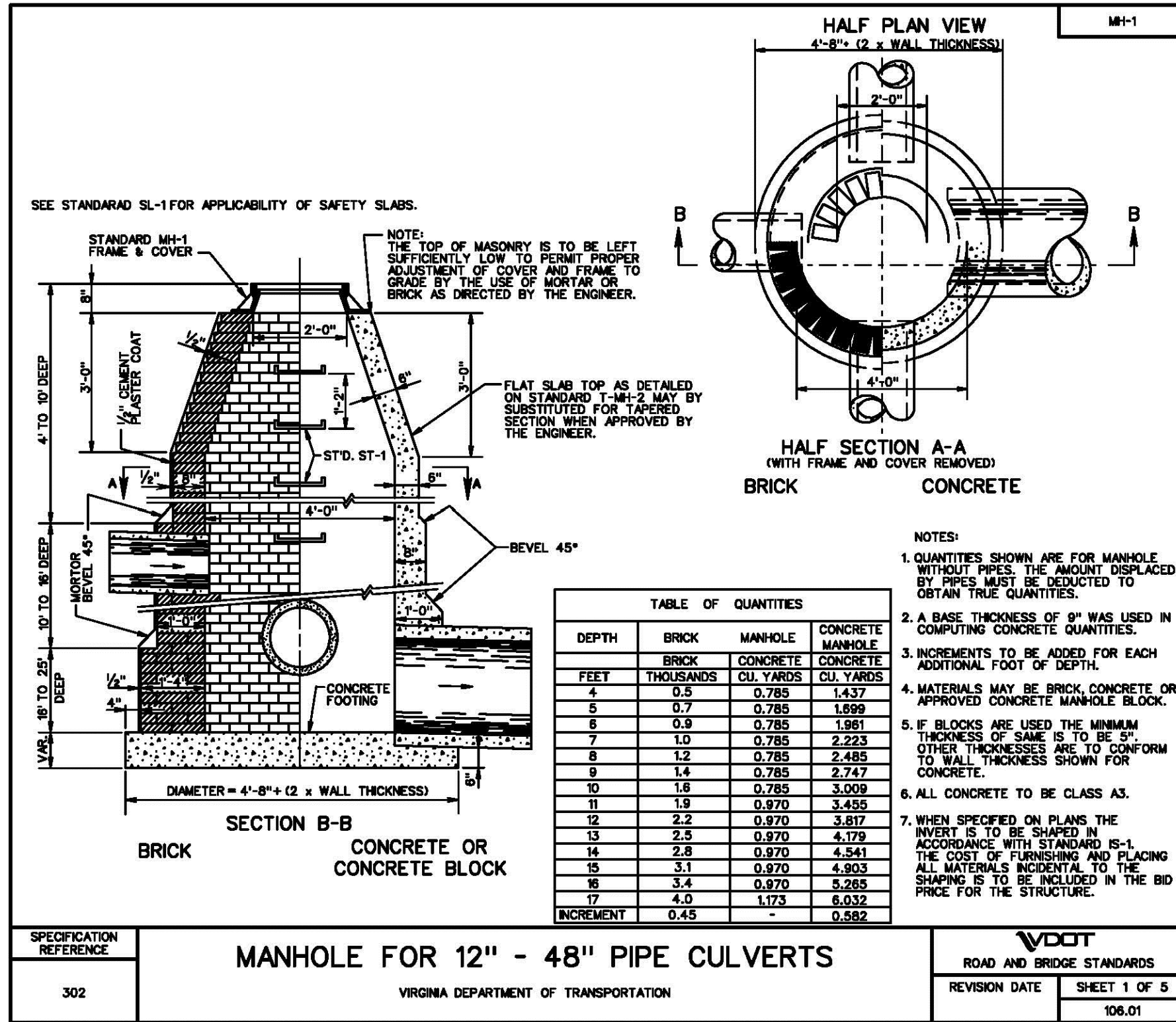
- FOR SIDEWALK REPAIR, REPLACE CONCRETE TO THE NEAREST CONSTRUCTION JOINT.
- AT DRIVEWAYS APRONS SIDEWALKS ARE TO MATCH APRON THICKNESS.
- 2% MAX CROSS-SLOPE FOR DRAINAGE TOWARD ROADWAY.

2



SIDEWALK, NORFOLK MODIFIED HS-206

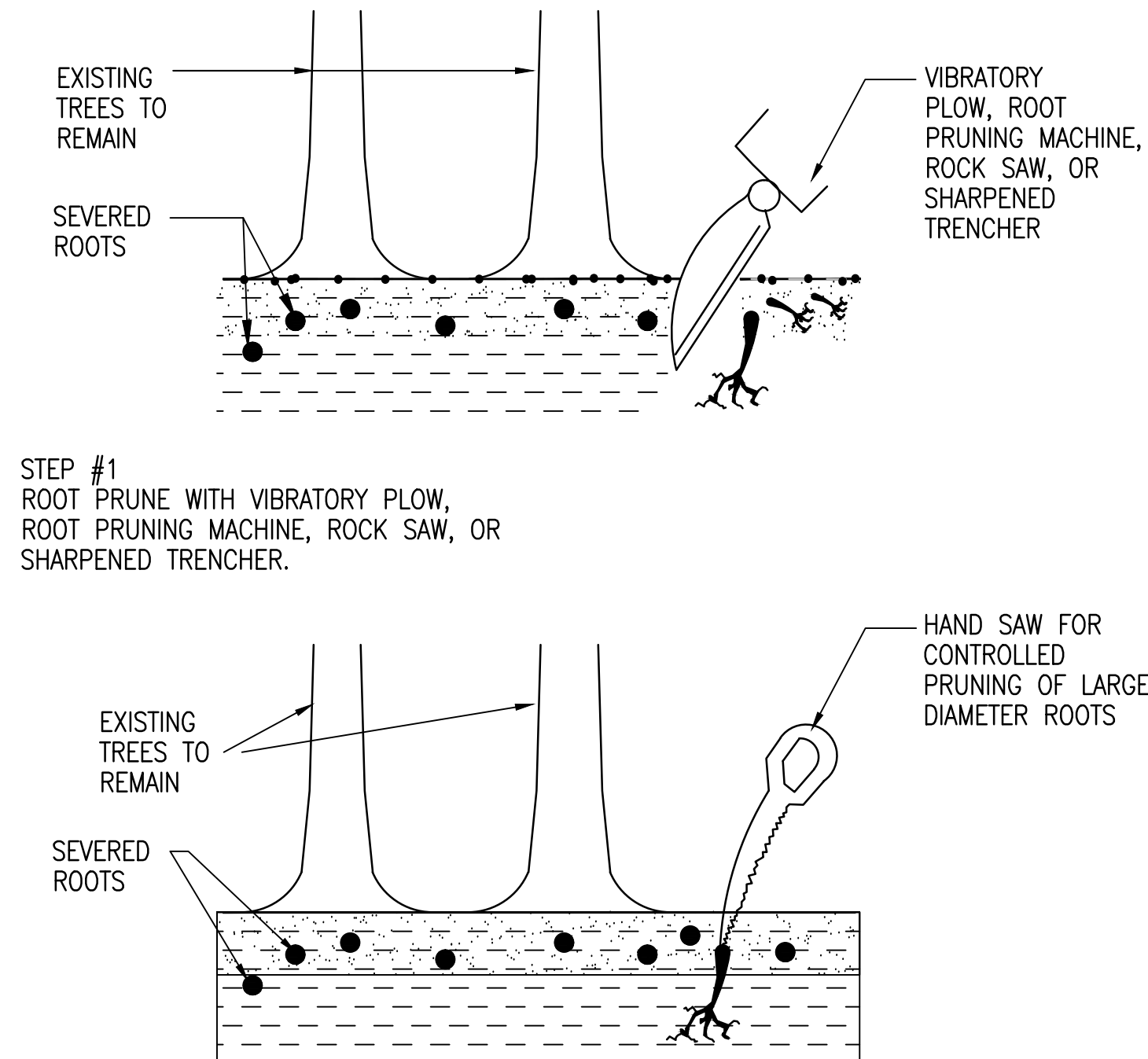
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VDOT STD MH-1

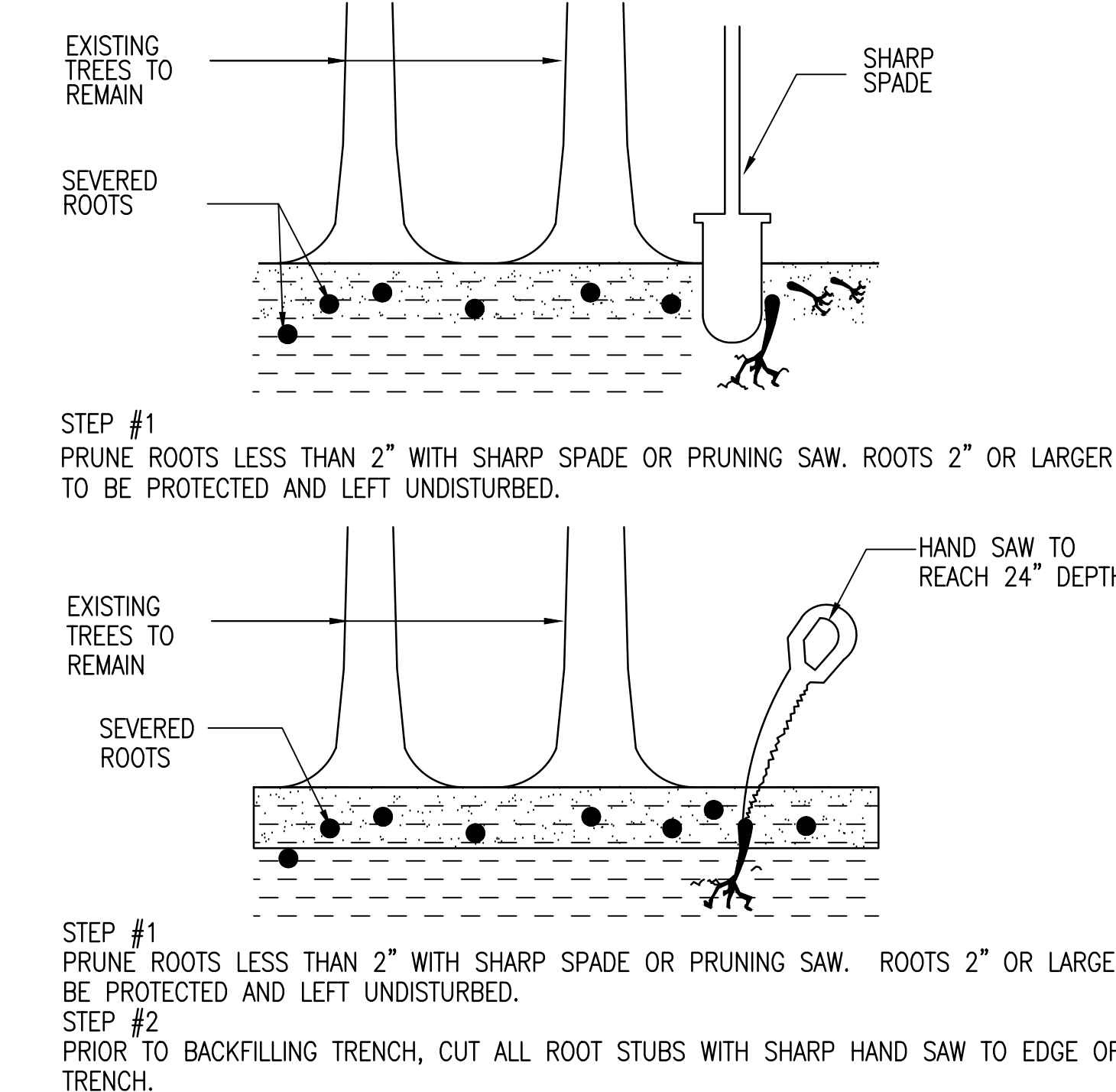
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5



ROOT PRUNE-MECHANICAL

NO SCALE

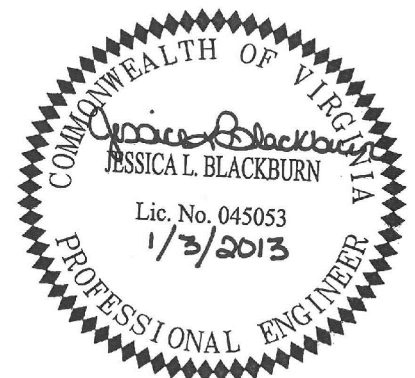


ROOT PRUNE-HAND

NO SCALE

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ROLAND PARK OVERPASS BRIDGE
RAMP IMPROVEMENTS
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DEPARTMENT OF PUBLIC WORKS
CITY OF NORFOLK, VIRGINIA

CN NO: 4183
DATE: 1/03/13
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DRAWN: BJL
REVIEW: CAR

REVISIONS
No. Date Description By

SITE DETAILS

C12

SHEET 13 OF 16

TRAFFIC MAINTENANCE & CONTROL NOTES

1. THE CITY OF NORFOLK, DEPARTMENT OF PUBLIC WORKS, RIGHT OF WAY DIVISION IS RESPONSIBLE FOR REVIEWING AND APPROVING ALL TRAFFIC MAINTENANCE AND CONTROL PLANS AND REVIEWING THE SEQUENCE OF CONSTRUCTION PLANS ESSENTIAL TO COMPLETE THIS PROJECT.
2. ALL TRAFFIC MAINTENANCE AND CONTROL DEVICES, METHODS AND APPLICATIONS SHALL CONFORM TO THE FOLLOWING PUBLICATIONS INCLUDING ALL CURRENT EDITIONS AND REVISIONS:
 - MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREET AND HIGHWAYS ISSUED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION. (MUTCD)
 - VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE STANDARDS VOL. II.
 - VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE SPECIFICATIONS.
 - VIRGINIA DEPARTMENT OF TRANSPORTATION WORK AREA PROTECTION MANUAL.
3. WORK HOURS IN ROADWAY OPEN TO TRAFFIC AND/OR PEDESTRIAN AREA:
 - MONDAY THROUGH SATURDAY: WORK SHALL BE COMPLETED BETWEEN THE HOURS OF 9:00 A.M. AND 4:00 P.M. ONLY.
 - SUNDAYS AND HOLIDAYS: NO WORK MAY BE COMPLETED IN THE ROADWAY AREAS UNLESS OTHERWISE NOTED OR APPROVED IN WRITING BY THE OWNER.ADDITIONAL RESTRICTIONS MAY APPLY BASED ON TRAFFIC CONDITIONS. EXTENDED WORK HOURS AND WORK DAYS MAY BE REQUESTED WITH A WRITTEN REQUEST TO THE OWNER. THIS REQUEST MUST BE SUBMITTED AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE EXTENDED WORK PERIODS. THE OWNER RESERVES THE RIGHT TO MODIFY THE WORK HOUR RESTRICTIONS DUE TO HOLIDAY TRAFFIC FOR WORK PERFORMED IN THE MONTHS OF NOVEMBER AND DECEMBER.
4. TRAFFIC MANAGEMENT PLANS:
 - TRAFFIC MANAGEMENT PLANS ARE INCLUDED FOR THIS PROJECT; HOWEVER, FIELD CONDITIONS MAY REQUIRE AMENDMENTS AND MODIFICATIONS. IF THE CONTRACTOR BELIEVES THAT THE TRAFFIC PLAN(S) INCLUDED WITH THIS PROJECT DOES NOT SUIT CONDITIONS AT A WORK SITE, THEN THE CONTRACTOR SHALL SUBMIT TO THE OWNER A REVISED PLAN TO MAINTAIN TRAFFIC. THE REVISED PLAN SHALL INCLUDE SITE SPECIFIC TRAFFIC DETAILS AND SHALL IDENTIFY THE SEQUENCE OF CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT THE REVISED TRAFFIC CONTROL PLAN(S) A MINIMUM 10 CALENDAR DAYS PRIOR TO THE START OF WORK. THE CONTRACTOR SHALL NOT DISRUPT TRAFFIC PATTERNS UNTIL THE OWNER HAS APPROVED THE REVISED TRAFFIC CONTROL PLAN. THE OWNER RESERVES THE RIGHT TO MODIFY ANY TRAFFIC CONTROL PLAN(S) AS NECESSARY IN THE INTEREST OF PUBLIC SAFETY OR TRAFFIC EFFICIENCY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSURE THAT ALL REQUIREMENTS HAVE BEEN MET AND THAT ALL TRAFFIC CONTROL DEVICES HAVE BEEN INSTALLED ACCORDING TO THE APPROVED TRAFFIC CONTROL PLAN(S).
5. THE CONTRACTOR SHALL CHECK ALL TRAFFIC MAINTENANCE AND CONTROL DEVICES AND WORK ZONES BEFORE, DURING, AND AFTER EACH WORK DAY TO ENSURE PROPER OPERATION. ON WEEKENDS, HOLIDAYS, OR ANY NON-WORKING DAY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING THE TRAFFIC MAINTENANCE AND CONTROL DEVICES DAILY FOR PROPER OPERATION.
6. IN ALL CASES IN WHICH EXISTING OR ESTABLISHED TRAFFIC PATTERNS SHALL BE DISRUPTED, THE CONTRACTOR SHALL NOTIFY ALL AFFECTED RESIDENTS AND/OR BUSINESSES A MINIMUM OF 48 HOURS IN ADVANCE OF THE ANTICIPATED DISRUPTION BY DISTRIBUTING DOOR-TO-DOOR NOTICES. A COPY OF THE NOTICE SHALL BE FORWARDED TO THE OWNER FOR REVIEW AND APPROVAL PRIOR TO BEGINNING WORK.
7. AT NIGHT OR DURING NON-CONSTRUCTION HOURS, ALL EXCAVATED AREAS ARE TO BE BACKFILLED OR SECURED AND PROTECTED BY USING APPROVED SAFETY DEVICES OR MATERIALS.
8. WHEN THE USE OF TYPE III BARRICADES IS REQUIRED (DAY OR NIGHT), ALL BARRICADES SHALL BE EQUIPPED WITH TYPE B HIGH-INTENSITY FLASHING WARNING LIGHTS.
9. IN ACCORDANCE WITH THE VIRGINIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS (CONSTRUCTION INDUSTRIAL) 29 CFR, PART 1929, 1989 EDITION, ALL CONTRACTOR EMPLOYEES AND SUBCONTRACTOR(S) EMPLOYEES EXPOSED TO VEHICULAR TRAFFIC SHALL BE PROVIDED WITH AND REQUIRED TO WEAR WARNING VESTS MARKED WITH OR MADE OF REFLECTORIZED OR HIGH VISIBILITY MATERIALS.
10. FOR CONSTRUCTION OPERATIONS LASTING MORE THAN 14 DAYS, THE CONTRACTOR SHALL INSTALL "ROAD WORK AHEAD" (W21-4, 48" X 48") AND "END ROAD WORK"(G20-2A, 48" X 24") WARNING SIGNS ON 6" X 6" WOODEN GROUND MOUNTED POSTS. THESE SIGNS MUST BE INSTALLED PRIOR TO BEGINNING CONSTRUCTION WORK AND SHALL BE REMOVED AFTER COMPLETION OF ALL CONSTRUCTION ACTIVITIES.
11. TWO MESSAGE BOARDS SHALL BE PLACED ON TIDEWATER DRIVE, ONE IN EACH DIRECTION, 7 DAYS IN ADVANCE OF THE DETOUR. THE MESSAGE BOARDS SHALL BOTH READ "XX RAMP CLOSED 60 DAYS" "START DATE THRU END DATE".

TRAFFIC MAINTENANCE & CONTROL NOTES (CONTINUED)

- 13.FOR ALL APPROVED CONSTRUCTION/TRUCK ENTRANCES, THE CONTRACTOR SHALL INSTALL "TRUCKS ENTERING HIGHWAY" (48" X 48" ORANGE AND BLACK) WARNING SIGNS ON 6" X 6" WOODEN GROUND MOUNTED POSTS. THESE SIGNS SHALL BE INSTALLED APPROXIMATELY 500 FEET IN ADVANCE OF ALL APPROVED CONSTRUCTION ACCESS/ENTRANCE POINTS.
- 14.ANY TRAFFIC CONTROL DEVICES INCLUDING BUT NOT LIMITED TO PAVEMENT MARKINGS, SIGNS, AND TRAFFIC CONTROL SIGNAL EQUIPMENT DAMAGED OR DESTROYED BY THE CONTRACTOR MUST BE REPLACED AT THE CONTRACTOR'S EXPENSE UNLESS THEIR REMOVAL OR DESTRUCTION IS CALLED FOR BY THE PLANS.
- 15.FOR ANY FURTHER INFORMATION ON TRAFFIC MAINTENANCE AND CONTROL REQUIREMENTS, PLEASE CONTACT THE DEPARTMENT OF PUBLIC WORKS, RIGHT OF WAY DIVISION, 810 UNION STREET, ROOM 200, NORFOLK, VA 23510. (757) 664-4696.
- 16.CONTRACTOR MAY BE REQUESTED BY CITY OF NORFOLK DURING CONSTRUCTION TO DISCUSS TRAFFIC CONTROL PLAN/MAINTENANCE OF TRAFFIC PLAN TO THE CITY OF NORFOLK DEPARTMENT OF PUBLIC WORKS/NORFOLK POLICE DEPARTMENT AT A JOINT TRAFFIC MITIGATION MEETING THAT IS HELD ON TUESDAYS AT 1:30 PM AT NORFOLK CITY HALL, 810 UNION STREET, ROOM 200, NORFOLK, VA.
- 17.CONTRACTOR IS REQUIRED TO OBTAIN A RIGHT OF WAY PERMIT PRIOR TO ALL LANE OR SIDEWALK CLOSURES WITHIN THE CITY OF NORFOLK. PERMIT SHALL BE OBTAINED THROUGH CITY OF NORFOLK RIGHT OF WAY DIVISION. HTTP://WWW.NORFOLK.GOV/PUBLICWORKS/PDF/SLs.PDF
- 18.ONLY ONE RAMP SHALL BE CLOSED AND DETOURED AT A TIME.

TRAFFIC CONTROL & LIGHTING

1. ALL STRIPING IN THE PUBLIC RIGHT-OF-WAY MUST BE OF THERMOPLASTIC MATERIAL FOR LANE LINES, STOP BARS, CROSSWALKS, ETC. ALL LEGENDS AND ARROWS MUST BE OF VDOT APPROVED TYPE B, CLASS VI PREFORMED PAVEMENT MESSAGE MARKING MATERIAL.
2. THE CONTRACTOR SHALL SIGN THE BEGINNING AND END TERMINI OF THE PROJECT PER TTC-18.0. IMPROVEMENTS SHALL BE DONE IN ACCORDANCE WITH THE NOTES AND FIGURES FROM THE VA WORK AREA PROTECTION MANUAL.
3. TEMPORARY LANE WIDTHS SHALL NOT BE LESS THAN 10 FEET.
4. ALL CONFLICTING PAVEMENT MARKINGS SHALL BE COMPLETELY ERADICATED OR COVERED.
5. ALL LANE SHIFTS SHALL BE ACCOMPANIED BY TEMPORARY OR PERMANENT PAVEMENT MARKINGS

GENERAL MAINTENANCE OF TRAFFIC NOTES

1. MAINTENANCE OF TRAFFIC SHALL BE IN ACCORDANCE WITH VDOT REQUIREMENTS FOR TMP PLANS FOR TYPE B PROJECTS FOR TYPICAL TRAFFIC CONTROL STANDARDS.
2. THE WORK ZONE IS LOCATED ON FOUR RAMPS OFF TIDEWATER DRIVE IN THE CITY OF NORFOLK.
3. MAINTAIN ACCESS TO ALL ENTRANCES AND ALL SIDE STREET INTERSECTIONS FOR EMERGENCY VEHICLES, SCHOOL BUSES, AND SERVICE VEHICLES AT ALL TIMES, EXCEPT DURING THE APPROVED DETOUR.
4. NO CONSTRUCTION MATERIALS SHALL BE STOCKPILED WITHIN THE "CLEAR ZONE" AS DEFINED IN THE FEDERAL HIGHWAY ADMINISTRATION, FHWA, "ROADSIDE DESIGN GUIDE". ALSO, NO EQUIPMENT OR MACHINERY SHALL BE LEFT PARKED OR UNATTENDED WITHIN THE CLEAR ZONE WHILE WORK IS NOT BEING PERFORMED.
5. IT IS NOT THE INTENT OF THE TRAFFIC MANAGEMENT PLANS TO ENUMERATE EVERY DETAIL WHICH MUST BE CONSIDERED IN THE CONSTRUCTION OF EACH STAGE, BUT ONLY TO SHOW THE GENERAL HANDLING OF TRAFFIC.

SPECIAL DETAILS

1. ALL AREAS EXCAVATED BELOW EXISTING PAVEMENT SURFACES AT THE CONCLUSION OF EACH WORKDAY SHALL BE BACKFILLED WITH AGGREGATE BASE MATERIAL TO FORM AN APPROXIMATE 3:1 WEDGE AGAINST THE EXISTING PAVEMENT SURFACE FOR THE SAFETY AND PROTECTION OF VEHICULAR TRAFFIC. ALL COST FOR PLACING, MAINTAINING, AND REMOVING THE 3:1 WEDGE SHALL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS IN THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED. SEE "FILLET OF MATERIAL DETAIL" ON THIS SHEET.

PUBLIC COMMUNICATIONS PLAN

1. EMERGENCY CONTACT INFORMATION: CALL 911 FOR NORFOLK POLICE, HAZ-MAT, ETC.
2. APPROPRIATE SIGNAGE SHALL BE INSTALLED IN THE PROJECT AREA AS ADVANCE WARNING.
3. CITY OF NORFOLK SHALL ISSUE TRAFFIC ADVISORY ANNOUNCEMENTS REGARDING ANY CHANGES IN TRAFFIC PATTERNS AND DETOURS.

TRANSPORTATION OPERATIONS PLAN

1. THE FOLLOWING IS A LIST OF LOCAL EMERGENCY CONTACT AGENCIES:
 - CITY OF NORFOLK POLICE DISPATCH 911
 - EMERGENCY DISPATCH CENTER 911
 - HAZ-MAT 911
2. PROCEDURES TO RESPOND TO TRAFFIC INCIDENTS THAT MAY OCCUR IN THE WORK ZONE:

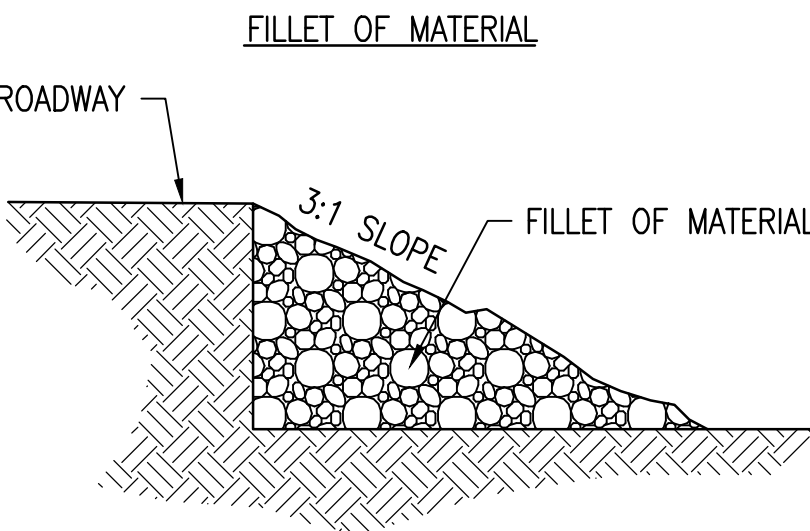
CONTRACTOR TO NOTIFY EMERGENCY DISPATCH CENTER 911 AND CONSTRUCTION INSPECTORS.

DEPENDING UPON SEVERITY OF INCIDENT, CONTRACTOR MAY HAVE TO CEASE WORK.

UPON ARRIVAL ON SCENE, POLICE TO DETERMINE RESPONSE NECESSARY TO ALLOW TRAVELING PUBLIC AROUND INCIDENT.

CONSTRUCTION INSPECTOR TO NOTIFY DEPARTMENT OF PUBLIC WORKS OF INCIDENT AND TAKE PICTURES AS NECESSARY - ESPECIALLY PICTURES OF CONTRACTOR'S WORK ZONE AND SIGNAGE.

3. THE POLICE WILL TAKE CONTROL OF THE INCIDENT AND DIRECT ITS CLEARING AND RESTORATION TO NORMAL TRAFFIC CONDITIONS. IF THE INCIDENT HAS INJURIES OR IS A HAZ-MAT, THE FIRE DEPARTMENT WILL CONTROL THE INCIDENT.
4. THE POLICE REPORT OF THE INCIDENT WILL BE REVIEWED BY THE DEPARTMENT OF PUBLIC WORKS TO DETERMINE IF ANY MODIFICATIONS OF THE TEMPORARY TRAFFIC CONTROL PLAN ARE NECESSARY. IF IT IS DETERMINED THAT IT IS NECESSARY TO ALTER THE PLAN, THEN A MEETING SHALL BE CALLED WITH THE CONTRACTOR, ENGINEERING PROJECT PERSONNEL, TRAFFIC SAFETY REPRESENTATIVES, AND THE POLICE (IF NECESSARY) TO DISCUSS MODIFICATION AND IMPLEMENTATION OF AN IMPROVED TRAFFIC CONTROL PLAN.



NOTES:

1. THIS DETAIL SHALL BE USED DURING ANY CONSTRUCTION IN WHICH OPEN ROADWAY CUT IS BEING USED FOR TRAFFIC ADJACENT TO EXISTING ROADWAY WITHIN THE CITY RIGHT OF WAY.
2. AT NIGHT OR DURING NON- CONSTRUCTION HOURS, ALL AREAS EXCAVATED BELOW EXISTING PAVEMENT SURFACES SHALL BE BACKFILLED WITH AGGREGATE BASE MATERIAL TO FORM AN APPROXIMATE 3:1 (H:V) WEDGE AGAINST THE EXISTING PAVEMENT SURFACE.

SEQUENCE OF CONSTRUCTION

1. ALL EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSTALLED PRIOR TO CONSTRUCTION.
2. MAINTENANCE OF TRAFFIC SHALL BE PROVIDED AS APPROVED BY CITY OF NORFOLK DEPARTMENT OF PUBLIC WORKS, RIGHT OF WAY DIVISION.
3. CLEAR AND ROUGH GRADE AREA OF CONSTRUCTION.
4. INSTALL STORM DRAINAGE PIPE AND STRUCTURES AS SHOWN ON SHEETS C7 AND C8.
5. INSTALL CURB.
6. CONSTRUCT PAVEMENT SECTION.
7. INSTALL GUARDRAIL, AND SIDEWALK.
8. FINE GRADE AND SEED ALL DISTURBED AREAS.
9. REMOVE EROSION AND SEDIMENT CONTROL DEVICES AFTER SITE IS STABILIZED.

Typical Traffic Control
Work Operation in the Vicinity of an Exit Ramp
(Figure TTC-37.0)
NOTES

- Guidance:
1. Sign spacing distance should be 1300'-1500' for Limited Access highways, and on all other roadways 500'-800' where the posted speed limit is greater than 45 mph, and 350'-500' where the posted speed limit is 45 mph or less.
 2. When flaggers are used, care should be exercised when establishing the limits of the work zone to insure maximum possible sight distance in advance of the flagger station and transition, based on the posted speed limit and at least equal to or greater than the values in Table 6H-3. Generally speaking, motorists should have a clear line of sight from the graphic flagger symbol sign to the flagger.

- Standard:
3. On divided highways having a median wider than 8', right and left sign assemblies shall be required.
 4. A temporary EXIT (E5-V1) sign shall be located in the temporary gore. For better visibility, it shall be mounted a minimum of 7 feet from the pavement surface to the bottom of the sign.
 5. Taper length (L) and channelizing device spacing shall be:

Speed Limit (mph)	Taper Length (L)			
	Lane Width (Feet)			
25	95	105	115	125
30	135	150	165	180
35	165	205	225	245
40	240	270	295	320
45	405	450	485	540
50	450	500	550	600
55	495	550	605	660
60	540	600	660	720
65	585	650	715	780
70	630	700	770	840
Minimum taper lengths for Limited Access Highways shall be 1000 feet				
Shoulder Taper = 1/2 L Minimum				

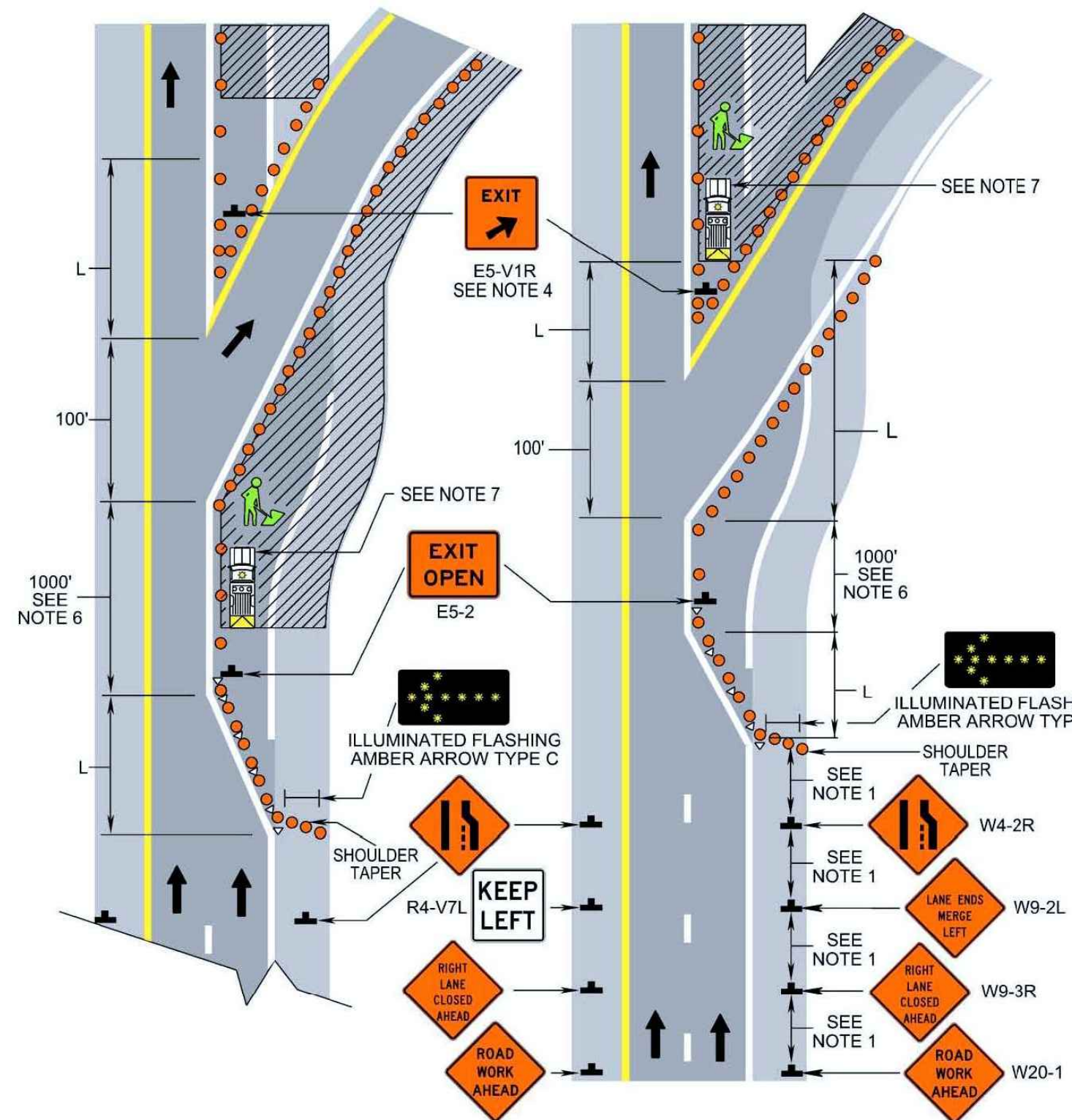
Location	Channelizing Device Spacing	
	Speed Limit (mph)	
	0 - 35	36 +
Transition Spacing	20'	40'
Travelway Spacing	40'	80'
Construction Access*	80'	120'

* Spacing may be increased to this distance, but shall not exceed one access per 1/2 mile

On roadways with paved shoulders having a width of 8 feet or more, channelizing devices shall be used to close the shoulder in advance of the merging taper to direct vehicular traffic to remain within the traveled way.

6. The minimum distance between the end of the taper and the beginning of the off ramp shall be 1000'.
 7. A shadow vehicle with either a Type B or C arrow board operating in the caution mode, or equipped with at least one high intensity rotating, oscillating, or amber strobe light shall be parked 80'-120' in advance of the first work crew. When the posted speed limit is 45 mph or greater, a truck-mounted attenuator shall be used
- Guidance:
8. The guide signs should indicate that the ramp is open, and where the temporary ramp is located. However, if the ramp is closed, guide signs should indicate that the ramp is closed.
 9. When the exit ramp is closed, a black on orange EXIT CLOSED (E3-2a) sign should be placed diagonally across the interchange/intersection guide signs.
 10. An END ROAD WORK (G20-2 (V)) sign should be placed 500' past the temporary traffic control devices on the off ramp.

- Option:
11. The temporary EXIT sign placed in the temporary gore may be either black on orange or white on green.

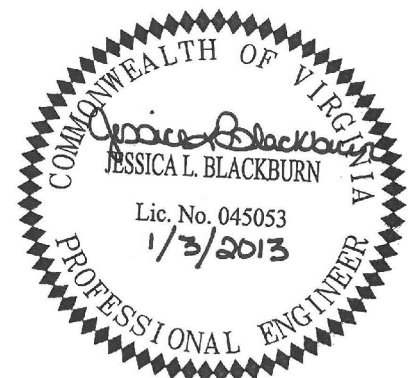


WORK OPERATION IN THE VICINITY OF AN EXIT RAMP (TTC-37.0)

NO SCALE

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ROLAND PARK OVERPASS BRIDGE
RAMP IMPROVEMENTS
ADDITIVE ALTERNATE #1
DEPARTMENT OF PUBLIC WORKS
CITY OF NORFOLK, VIRGINIA

CN NO: 4183
DATE: 1/03/13
DESIGN: JLB
DRAWN: BJL
REVIEW: CAR

REVISIONS
No. Date Description By

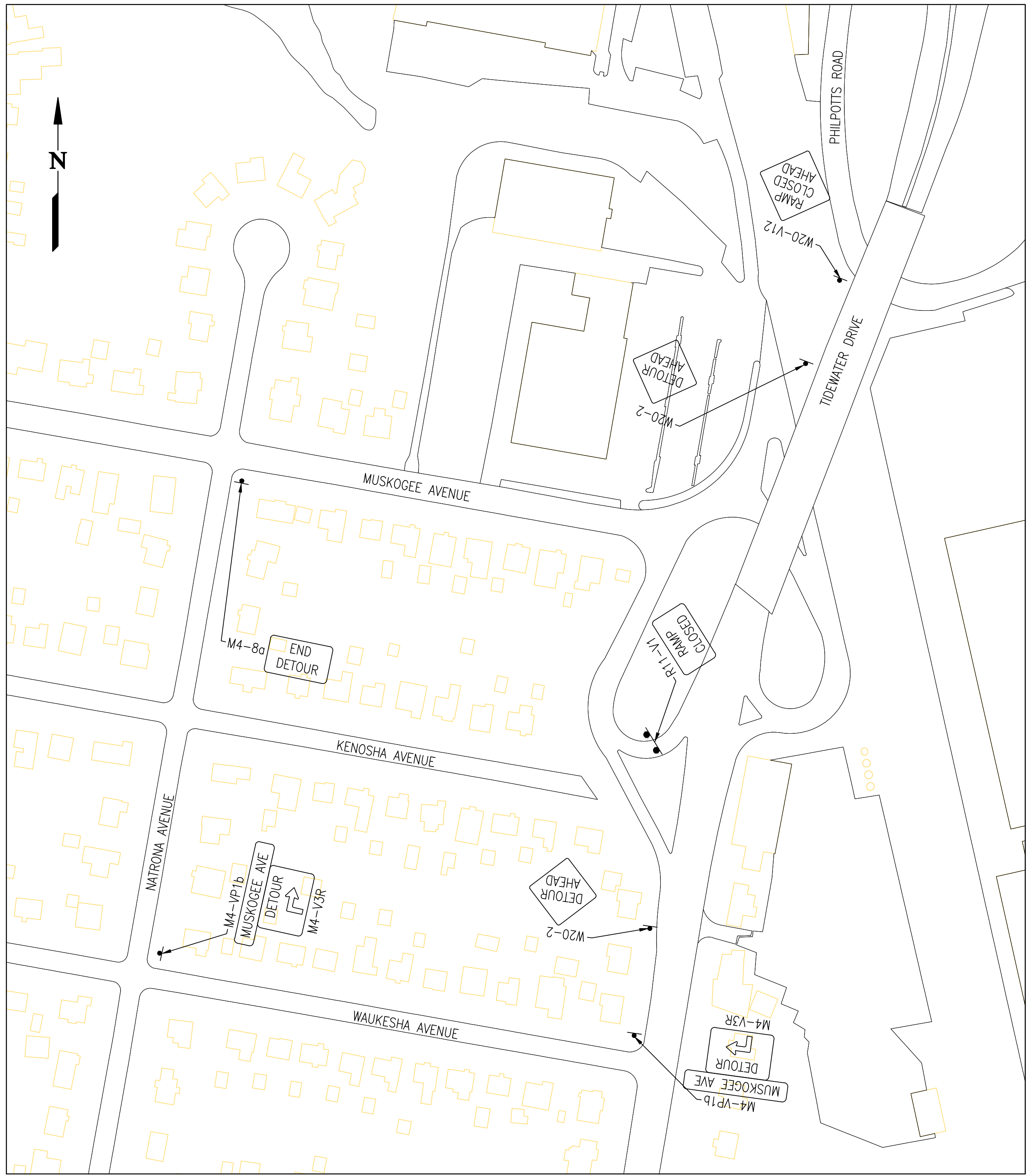
MAINTENANCE OF TRAFFIC
NOTES & DETAILS
C13

SHEET 14 OF 16

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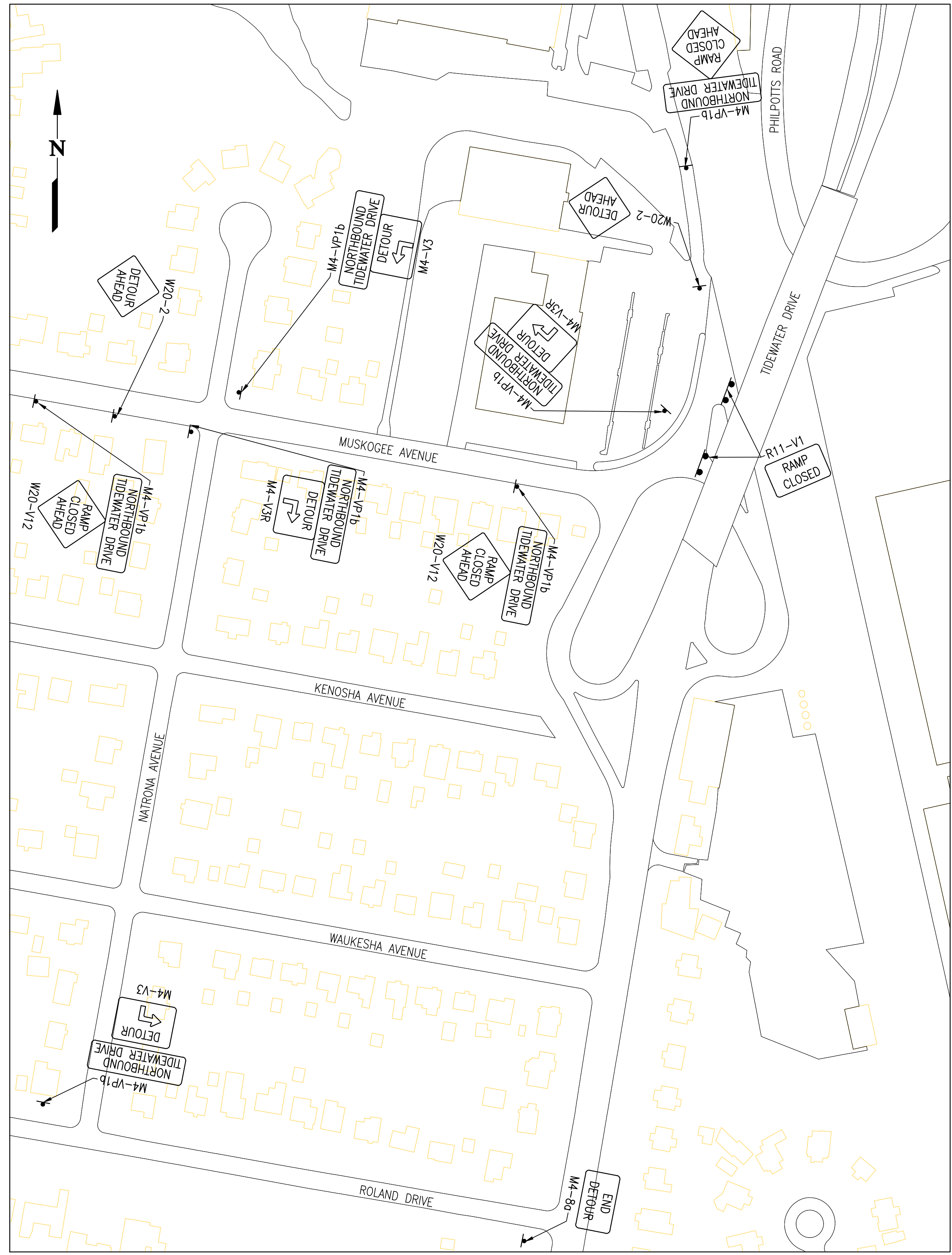
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DETOUR PLAN - SOUTHWEST RAMP

SCALE: 1" = 100'

NOTE: ONLY ONE RAMP SHALL BE CLOSED AND DETOURED AT A TIME.



DETOUR PLAN - SOUTHEAST RAMP

SCALE: 1" = 100'

GRAPHIC SCALE(S)



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**ROLAND PARK OVERPASS BRIDGE
RAMP IMPROVEMENTS
ADDITIVE ALTERNATE #1**
DEPARTMENT OF PUBLIC WORKS
CITY OF NORFOLK, VIRGINIA

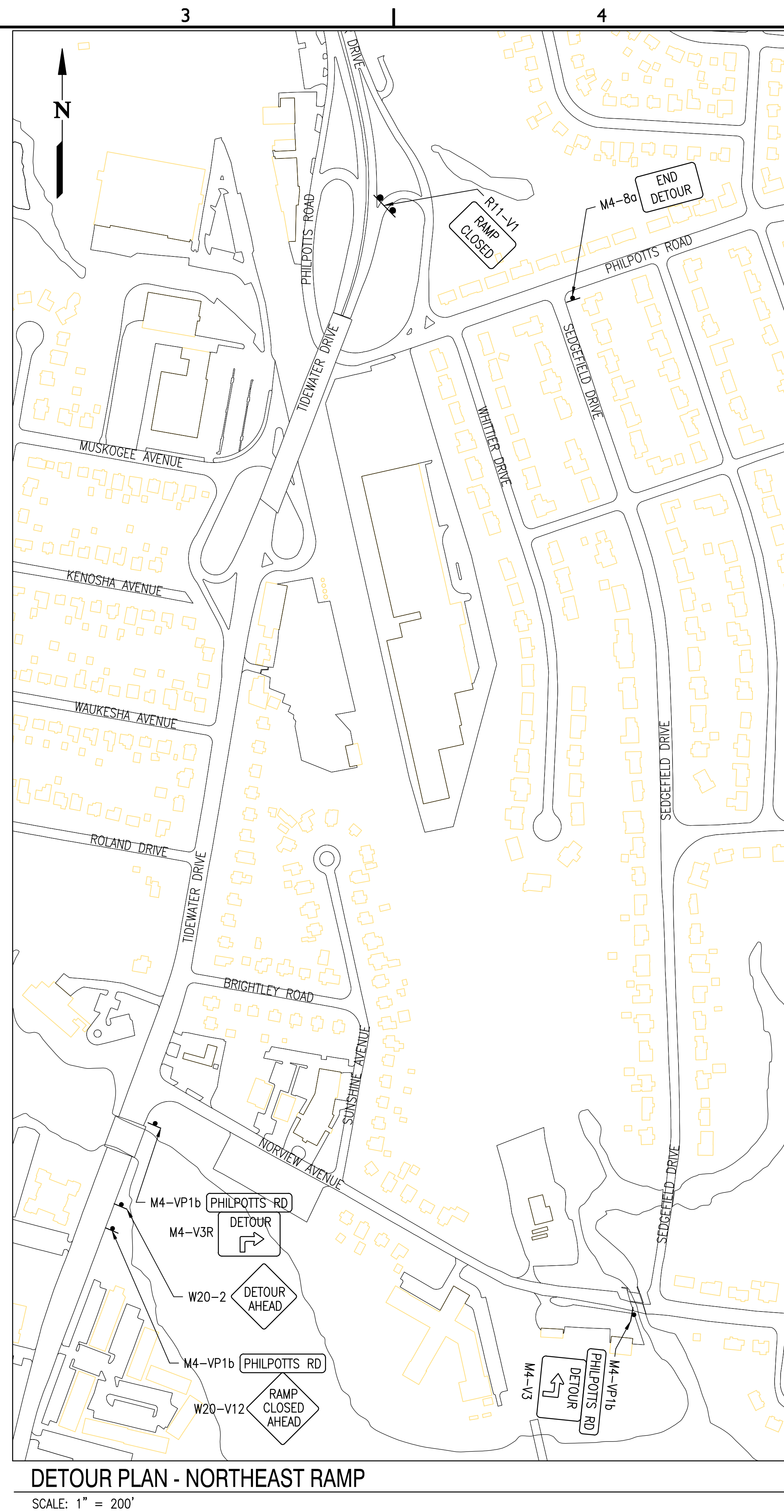
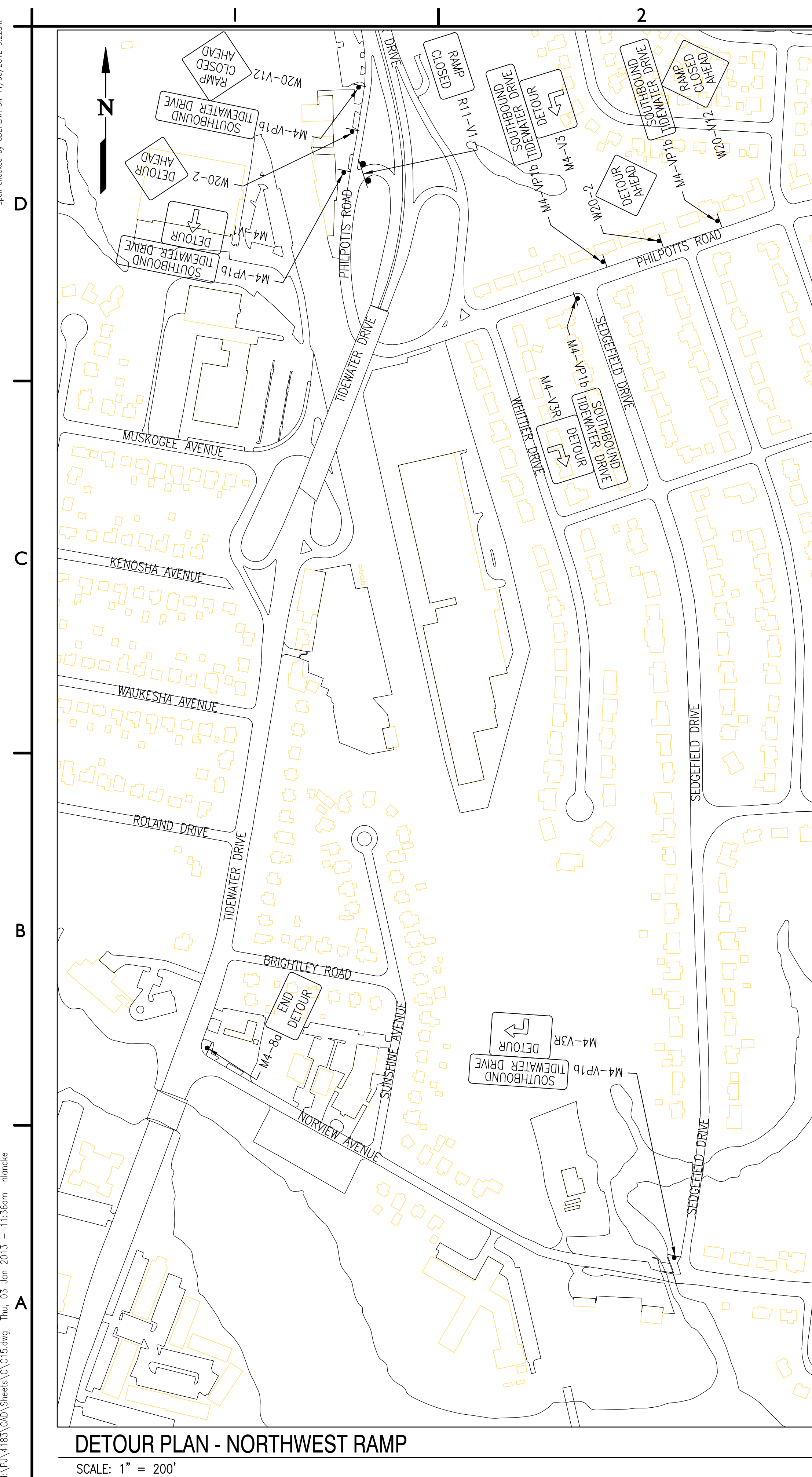
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DATE:	1/03/13		
DESIGN:	JLB		
DRAWN:	ENB		
REVIEW:	CAR		
REVISIONS			
No.	Date	Description	By

**MAINTENANCE
OF TRAFFIC -
DETOUR PLAN**

C14

SHEET 15 OF 16

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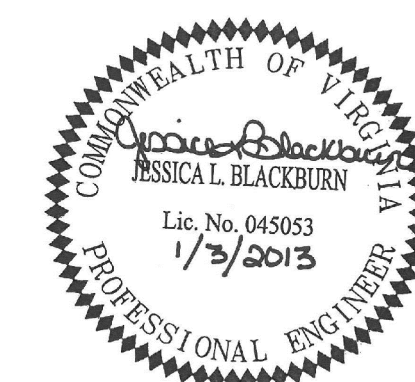
NOTE: ONLY ONE RAMP SHALL BE CLOSED AND DETOURED
AT A TIME.

GRAPHIC SCALE(S)



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ROLAND PARK OVERPASS BRIDGE RAMP IMPROVEMENTS ADDITIVE ALTERNATE #1

DEPARTMENT OF PUBLIC WORKS
CITY OF NORFOLK, VIRGINIA

CN NO: 4183
DATE: 1/03/13
DESIGN: JLB
DRAWN: ENB
REVIEW: CAR

REVISIONS			
No.	Date	Description	By

MAINTENANCE OF TRAFFIC - DETOUR PLAN

C15

SHEET 16 OF 16